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**The Medical Officer of Health
& Social Services**


R C WOFINDEN, MD, MRCP, DPH, DPA

City & County of Bristol



REPORT FOR

1969



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**THE HEALTH AND
SOCIAL SERVICES OF BRISTOL
IN 1969**

THE HEALTH OF BRISTOL IN 1969

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THE HEALTH AND SOCIAL SERVICES OF BRISTOL 1969

My Lord Mayor, Ladies and Gentlemen,

I have the honour to present my fourteenth Annual Report on the health of the City and County of Bristol, which is compiled in accordance with Department of Health and Social Security Circular 1/70.

Vital Statistics

The Registrar-General estimated that the population in 1969 was 427,230 compared with 427,780 in 1968. The live birth rate in 1969 was 15·6 compared with 16·2 in 1968, again indicating the widespread use of family planning advice. There were fewer illegitimate live births in 1969, 686 compared with 699 in the previous year but the percentage was slightly higher at 10·6%.

The infant mortality rate of 16·2 per thousand was the lowest ever recorded in the City and the second lowest among twelve of the largest county boroughs in England and Wales but the rate for illegitimate infants of 24·8 was high compared with the legitimate rate of 15·2. In May 1970 a report of a confidential infant mortality enquiry in a number of authorities including Bristol, concluded that there were avoidable factors in 28% of post neonatal deaths. Forty-six per cent were associated with a social defect and 40% with poor housing conditions.*

The stillbirth rate of 12·2 per 1,000 equalled the record low level of 1964 and the perinatal rate of 20·5 was the lowest ever recorded in the City and the lowest of the 12 county boroughs studied.

There was one maternal death during the year, an expectant mother aged 42 having her fifth child who died in the 7th month of pregnancy undelivered as a result of pulmonary embolism.

The adjusted death rate of 12·1 per 1,000 was lower than the provisional rate for England and Wales (12·5) and was the lowest among the 12 biggest county boroughs. The principal killing diseases in Bristol were as in previous years, ischaemic heart disease (24·9%) malignant neoplasm (20·4%), respiratory diseases excluding cancer (14·7%) and cerebrovascular disease (14·0%).

Deaths from cancer of the lung and bronchus among men increased from 225 in 1968 to 257 in 1969. The comparable figure for women fell from 46 to 45. There were 91 deaths from cancer of the breast and 39 from cancer of the uterus.

This year's annual report includes a review of the mortality trends from violence in the city over the past 20 years. Overall there has been little change—in 1950 there were 163 deaths compared with 198 in 1969—except for a slight rise in the number of road accident deaths, almost certainly associated with the increase of traffic volume in the city. In 1969 there were 49 deaths in the home, 59 deaths on the road and 2 deaths due to homicide. In addition 35 people committed suicide, 40% of them by coal gas poisoning.

Infectious diseases and their prevention

For the twentieth consecutive year there was no case of diphtheria in Bristol, and for the eighth year none of poliomyelitis. There was a dramatic fall in the number of

* Confidential enquiry into post neonatal deaths 1964-66, Department of Health and Social Security. Reports on Public Health and medical subjects number 125 H.M.S.O.

cases of whooping cough from 261 in 1968 to 21 in 1969, possibly associated with the introduction of improved types of vaccine since 1967. Returns published by the Department of Health and Social Security showed that by the end of 1969, of Bristol children born in 1967 90% had been protected against whooping cough, 91% against diphtheria but only 72% against poliomyelitis. Of children aged under 2, 38% had been vaccinated against smallpox by the end of the year.

Of 1,462 notifications of measles, 930 were in children aged less than 5 years, compared with 933 in 1968, but only 15 had been vaccinated against the disease. Unfortunately there were vaccine supply difficulties from March onwards, and only 3,340 courses were completed by the end of the year compared with 7,039 in 1968. Unless the rate of immunisation is increased, we must expect reversion to as high incidence as was usual in "measles winters" in the past.

There were 912 notifications of rubella (766 relating to children aged less than fourteen years) compared with 3,325 in 1968. During the last two months of 1968 (nine months after the incidence of rubella began to build up in Bristol) 3 children were born with severe nerve deafness and congenital heart disease. In addition, two of these children were partially sighted and had other abnormalities ascribable to rubella. Of the mothers of these children, one had the illness of rubella during the first trimester of her pregnancy and two were 'contacts' of rubella during this danger period. These mothers were not notified to the Medical Officer of Health and as far as can be ascertained did not receive gamma globulin protection after exposure to risk.

During 1966 one child is known to have been damaged by rubella virus in utero; during 1967 three children; and during 1969 one.

There seems to be a strong case for further publicity and encouragement to mothers to consult their doctors immediately if they are in contact with rubella and think that there is any possibility that they may be pregnant.

In April 1970 it was shown in a small sample of thirteen-year-old Bristol girls that more than 80% had antibodies to rubella. Trials of rubella vaccine in older school children have started and consideration was given to post partum vaccination of sero-negative women attending ante-natal clinics.

There was a sudden increase in winter illness during December. The A 2 virus was first isolated on the 12th December. Sickness benefit claims increased in the weeks immediately before and after Christmas and in the last 12 days of the year 29 deaths were attributed to influenza and 65 to pneumonia.

Tuberculosis

There was a further fall in the number of new cases of tuberculosis, (60 pulmonary and 17 non-pulmonary) compared with 89 in 1968. Six new cases of pulmonary tuberculosis were reported in people aged under 20 years.

Ten new cases excreting resistant tubercle bacilli were reported in the Bristol clinical area in 1969. Of the 15 cases on the T.B. Resistant Register at the end of the year, 9 were resistant to one drug only, 3 to 2 drugs and 3 to 3 drugs.

Foreign Travel

Three cases of typhoid fever, three of paratyphoid fever, and four of malaria (two of which were fatal) were notified in 1969. Additional publicity material has been prepared to emphasise the importance of vaccination against typhoid fever for anyone travelling abroad except to North America, Scandinavia and the low countries.

Venereal Disease

There was a 29% increase in male cases of gonorrhoea and a 68% increase in female cases in 1969 as compared with the previous year. The increase in the number of female cases was disproportionately high. In 1969 the sex ratio at the main Bristol clinic was 1.4 male cases of gonorrhoea to each female case compared with a ratio of 4 to 1 some years ago. Among female patients attending for the diagnosis and treatment of gonorrhoea 32% were aged less than 20 years. Perhaps this represents the price women are now paying for their greater emancipation, but excellent case finding and contact tracing have also contributed to this result.

Maternal and Child Care

In 1969 just over 90% of Bristol babies were born in hospital. The short stay General Practitioner Unit at Southmead Hospital has proved a great success. It was temporarily closed in May 1969 for electrical rewiring, but the United Bristol Hospitals generously offered similar facilities at the Bristol Maternity Hospital. Short stay visits exist in other cities but the idea originated in Bristol.*

As in 1968, planned early discharge from maternity hospitals was very popular, especially among families where the husband elected to take his holiday at this time in order to look after his wife and baby.

By the end of 1969 the Family Planning Association was holding sessions at nine of the Department's clinics or health centres. The Department itself provided a free service for those needing birth control advice for medical or social reasons. Our service dealt with 928 new and 3,112 old clients.

A total of 5,492 women had cervical smear tests for the early detection of cancer of the cervix compared with 5,825 in 1968. In addition, 528 staff members and 344 employees of six local firms (usually on the firm's premises) attended sessions. One woman was found to have carcinoma of the cervix and was treated by immediate hysterectomy and 17 had a cone biopsy for carcinoma in-situ. Shortages of trained laboratory staff is a continued frustration—it is useless stepping up our efforts to increase acceptance rates when the hospital laboratories are unable to examine smears for us.

In October, Her Royal Highness The Princess Anne opened officially the purpose-built forty-five place day nursery for young children in the St. Paul's and other central districts.

Towards the end of the year testing for phenylketonuria was carried out by the Guthrie method on the seventh day of life, usually in hospital, or if the mother has been discharged home or confined there, the test is carried out by the domiciliary midwife.

Health Education

Special efforts were made during the year to sustain the drive against venereal disease. An attractively coloured fablon notice was offered to the managements of large stores, hotels, hospitals and other places where members of the public shop, are entertained or are treated. The co-operation of these organisations has been much appreciated. A special feature of the campaign was the display of posters indicating the location and times of the V.D. clinics on 250 of Bristol's buses for one year. There is much public ignorance about venereal infection, and interesting facts were elicited

* SLUGLETT, J. and WALKER, S. (1956) *Lancet*, I 684.

from answers to a questionnaire on the disease put to 296 students at two teacher training colleges and a technical college. Mature male students showed the best knowledge, averaging only 4.5% "don't know" or "wrong" answers. In order to extend our Health Education programme in schools, talks were held with the Chief Inspector for Schools and his colleagues to discuss a possible V.D. education programme. Following the establishment of working parties in each of the 5 Education Divisions of the City, 36 teachers have been appointed as Health Education Convenors. It will be their job to incorporate V.D. education in the Health Education programmes.

Instruction in mouth-to-mouth resuscitation was given to 6,200 pupils and members of staff in 27 schools and there were other special sessions for teachers and students.

The film "A Future for Amanda" was completed by Bristol Ciné Society. It is a worthy successor to "Marlborough House", made in 1958, and has already won the Bell Trophy in the Scottish Film Festival.

The booklet "Drug Dependence" continued to be in demand and by the end of the year 30,000 copies had been sold or distributed.

Two posters were produced and widely used : one on "Vaccination and Immunisation" and the other on the "Kiss of Life".

The Research Division of the new Health Education Council was established in Bristol in June 1969 and close working relationships have already been forged with the City and University Public Health Departments. A collaborative study on fatal home accidents in North Bristol will be started in September 1970.

Home Safety

In the report of Bristol Home Safety Council there is an analysis of fatal home accidents during the year in which it is noted that the average age of females involved was 83 years. Poisoning caused the death of four females and three males in 1969 and there have been three similar cases in the first three months of 1970. Faulty bathroom geysers were the cause of the deaths of a boy of 14 and a man of 31, emphasizing the need for householders to see that their gas appliances are regularly serviced and that bathrooms are properly ventilated. Four females, one a girl of twelve months who fell into a washing machine, and three males died from burns or scalds.

The main activities of the Home Safety Council during the year were a continuation of the Water Safety Campaign; an exhibit at the Flower Show and a drama festival held in the autumn. There was tremendous public interest in the Flower Show exhibit "Learn to Save a Life" and volunteers from statutory and voluntary organisations were fully employed in demonstrations throughout the show.

Nursing Services

During the year the use of ancillary help was splendid. The nursing establishment now includes not only State Registered and State Enrolled nurses, welfare and clinic assistants and clinic helpers but also nursing assistants. The latter relieve district nurses of duties which a relative or neighbour would normally undertake if available. The number of visits made by district nurses in 1969 was 250,155 compared with 245,332 in 1968.

During the year attachment of district nurses to general practitioners was extended, priority being given to the larger practices and to those in which nurses could be given a base at the practice premises. By July 1970 36 nurses were attached to 85 doctors.

With the continuing decline in T.B., specialised health visitors become less necessary. By August only one Liaison Tuberculosis Health Visitor remains in post. She makes the initial visit to newly notified tuberculosis patients and organises contact tracing and first examinations. Subsequent visiting to these patients is now done by district health visitors.

A new scheme of integrated nurse training for Enrolled nurse pupils at Manor Park Hospital was started during the year. Eight pupils were seconded to the Department for twelve weeks during their second year of training. Thereby they gained a wider knowledge of community services. It is hoped that similar arrangements will be made with other hospitals in the City. The teaching load on the staff of the Department is likely to increase substantially through these developments.

Home Help Service

Recruitment to the service was good throughout the year. It still remains difficult to supply areas of the City such as Clifton, Hotwells and Redland with a service because relatively few home helps live in these districts and public transport within the districts is poor for home helps living elsewhere. The in-service and refresher training courses were combined in January, senior home helps and new entrants being paired off. The course is still of 20 hours duration, 10 spent in talks, discussions, films and demonstrations and 10 in practical work. During the year 11 combined schools were attended by 217 home helps. Of the 100 new entrants only 5 withdrew during or at the end of the course. The aims of the course have been fulfilled: providing a uniform standard throughout the service, giving the home help an awareness of her role in the changing social scene; and stimulating, encouraging and giving them a sense of belonging.

There were 2,377 requests for help during the year, most often by medical social workers (640); general practitioners (526); and patients or relatives (410). The practice of selecting one or more home helps to cover blocks of flats, elderly people's dwellings or groups of patients living close together has steadily increased. Elderly people, often owner occupiers of property in a poor state of repair, are not so easily served.

Mental Health Service

At the end of the year there were 751 subnormal persons and 256 people suffering from mental illness receiving home visits from the social workers. The 13,000 home visits made by the 12 social workers and their 6 assistants amounted to only one third of their duties. The remainder of their time was occupied in other activities, such as dealing with mental health emergencies, compiling reports and returns, interviewing clients in the office, attending case conferences, visiting hostels, hospitals and training centres and in dealing with the property of mentally disordered people who were unable to manage their own affairs. A survey of the work undertaken established that at least six additional Mental Welfare Officers will be needed to enable the Community Mental Health Service to function at a satisfactory level.

On 1st January 1969 there were 38 names on the waiting list for admission to the hospitals for the subnormal and severely subnormal and during the year 38 names were added. Twenty-six patients (17 male and 9 female) were admitted to hospital, leaving a total of 50 awaiting vacancies at 31st December 1969. It has been difficult to find hospital vacancies, although there has been close co-operation with the psychiatrists of the three groups of hospitals serving the Bristol area. The hospital authorities have not yet provided special units for day care but at the end of the year three children and thirteen adults were being provided with day care in main hospital buildings.

Throughout 1969 the Snowdon Road Workshops functioned with all 50 places filled and a short waiting list. As in 1968 the main occupation was the making of dressing packs and cytology sets for the South Western Regional Hospital Board Supplies Department and in addition simple assembly tasks were carried out for a number of local manufacturers. It has been possible also to receive pupils from special schools for the educationally subnormal on a day release basis and 29 children gained workshop experience during their final year. It is encouraging that 10 trainees left the unit to start employment in industry during the year.

In the Junior Training Centre it was possible to abolish the need for a waiting list by the use of part-time places and at the end of the year there were 144 names on the register of the Junior Training Centre and 31 on the Special Care Unit list.

A six-weeks evening course on Speech Development was conducted by the speech therapists for the benefit of parents of children attending the Centre.

The Variety Club of Great Britain generously donated a minibus to the Centre enabling the staff to take children away on many visits of interest and instruction.

The number on the register of the Adult Centre fell slightly from 189 in December 1968 to 185 in December 1969. Thirteen trainees were transferred to the Snowdon Road Workshops; nine went into hospital, some obtained other employment or their parents made different arrangements, usually when they left the area. Among the evening activities is a sewing class which started in January 1969.

At the end of the year there were 26 boys and girls attending the Stratton Street Day Centre.

During the year there were 118 admissions to the residential unit for mentally subnormal children and 58 families had benefited from this service, particularly during holiday periods or at times of social emergency. The 24-place Marlborough House Hostel was used almost to capacity throughout the year but there have been periods of under occupancy at Devon House Hostel where there has been a rewarding turnover of residents, 13 having left the unit to be replaced by 13 new clients.

After 20 months of operation the value of Petherton, a mixed hostel for 35 elderly mentally infirm residents, has been well established. At times it has been difficult to obtain hospital beds for residents whose conditions have deteriorated. Four residents were transferred to old people's homes during the year, five went back to their own homes but two were subsequently readmitted as long term residents.

Club activities at Somerset House, Steeven's House and in connection with the Townsend Youth Club continued at a high level.

Ambulance Service

Demands by the hospital on the Ambulance Service continued at the same high level as 1968.

Emergency calls increased from 8,286 to 8,969 the highest number dealt with by the service in a year.

The training of ambulance staff was intensified nationally and locally, and the issue by the Ambulance Services Advisory Service of a Proficiency Certificate for Ambulancemen created the long awaited opportunity for staff to obtain a permanent qualification in their chosen employment. In conjunction with the medical and nursing staff at Bristol Royal Infirmary a scheme was started in which an ambulanceman is seconded each week to the hospital for training purposes.

A national agreement was concluded setting out a pay structure for ambulance employees incorporating financial recognition for experience, training and qualification, doing much to improve status and financial rewards.

Mr. E. C. G. Joy, who was promoted Chief Ambulance Officer in February 1969, contributes an interesting review of the trends in ambulance work since the inception of the service in 1948.

Services for the Elderly and Handicapped

Mr. R. C. Travill, Principal Welfare Services Officer, gives details of development during the year in services for the elderly and handicapped.

At the end of the year there were 914 beds in homes administered by the Social Services Committee and another 148 aged or disabled persons were in homes provided by other local authorities or voluntary bodies. Residents contribute towards the cost of their maintenance according to their means between a minimum payment of £4 a week and the full standard charge of £13 3s. 8d. per week. It is not generally realised that about 35% of the residents contribute more than the minimum charge. The run down of 100 Fishponds Road continued from 125 residents at the end of 1968 to 50 at the end of 1969 and it is hoped that, with the opening of the Southmead Home in the autumn of 1970, 100 Fishponds Road will be closed.

Two new homes were opened during the year, Hayleigh (Bedminster) by The Right Honourable The Lord Mayor of Bristol, Alderman H. W. M. Willcox, in June 1969 and West Leigh (St. George) by The Right Honourable The Deputy Lord Mayor of Bristol, Councillor (now Alderman) Mrs. Mercia E. Castle, O.B.E., J.P., in October 1969.

Residents admitted to the Homes in recent years have been older and more frail, necessitating a review of the ratio of staff to residents and the suitability of some of the older buildings. It was decided to split Meadowsweet into four individually staffed unit homes.

Close co-operation with the Housing Committee continued in the provision of sheltered housing for the elderly and at 31st June 1970 there were outstanding 996 applications from elderly persons for Corporation housing, 659 being one-person units and 337 two-person units.

By the end of 31st March 1970, 675 purpose-built dwellings had been provided by the local authority and 257 dwellings had been provided by voluntary bodies or were in hand. Under construction for the Corporation there were 126 dwellings and for housing associations 239. In the programmes for 1970/71 the Corporation plans to build 178 dwellings and housing associations 123. Finally there are projected 450 Corporation dwellings and 128 housing association units. This aspect of housing is obviously being given high priority but there remains an urgent need for more sheltered accommodation.

The Mobile Meals Service has continued to develop and during 1969, 312,293 meals were distributed and at the end of the year 1,477 people were receiving meals. The service is available on five days a week and in July 1970 it was decided to increase the charge from 2s. 0d. to 2s. 5d. per meal.

Routine visiting of elderly people at home continued and in 1969 the Liaison Officer service formerly supported by a grant to Bristol Old People's Welfare Incorporated was integrated into the Department. As a result co-operation between statutory

and voluntary service was improved, the Liaison Officer acting as a "go between" linking people needing the service and those wishing to offer one.

At the end of 1969 8,448 elderly people were receiving chiropody treatment compared with 7,961 in 1968 and the comparable totals of physically handicapped were 121 and 91 respectively. Just over half of the total of 47,462 treatments carried out by the service took place in clinics, but with an ageing population it is significant that 10,782 treatments were carried out in the patients' homes. It is difficult to keep pace with the demand for chiropody although we have been fortunate in the number and quality of full and part-time qualified staff. The importance of preserving the mobility of old and handicapped people cannot be over estimated but it is doubtful whether the output of training schools in chiropody will keep pace with these rapid developments. The Education and Social Services Committees paid attention during the year to the possibility of establishing training facilities in the Bristol area at Bristol Polytechnic.

Environmental Health Services

The total number of visits made by public health inspectors increased during the year by approximately 2,000 to 86,453. Complaints rose to a record total of 15,073 and of these 10,069 related to public health and housing matters, 2,876 to rats and 2,118 to mice.

Special attention was given to the enforcement of Food Hygiene (Market Stalls and Delivery Vehicles) Regulations 1966, the outcome of which was a number of prosecutions.

There has been a marked decrease of the number of foggy days in recent years and December sunshine recorded at Long Ashton has increased by 14% in the last decade. How far this is a reflection of a cleaner atmosphere is uncertain.

It is disappointing to report shortages of smokeless fuel which will become critical in the winter of 1970/71 particularly when only 27% of the total area of Bristol and 17% of premises are included in smoke control areas. In July 1970 the Social Services Committee recommended the suspension of Smoke Control Orders 6, 7 and 8 including all the mainly residential areas.

During the year there was an accidental emission of arsenious oxide from an industrial undertaking at Avonmouth. Growing industrial developments on Severnside has led to the setting up of the Bristol University inter-disciplinary research project (Sabrina project), to study the effect on the environment. A full time co-ordinator has been appointed and funds obtained from the Natural Environment Research Council.

The number of complaints of noise received increased from 95 in 1966 to 192 in 1969. Most of the complaints concern industry, building and demolition works and the use of pneumatic breakers. These complaints are, in the main, resolved informally by the public health inspectors. Only rarely is formal legal action necessary

This report includes notes about the implications of the Housing Act 1969 and of a survey of basements, their repair and improvement. Houses in multiple occupation continue to present problems, especially in central parts of the City.

There was an overall decrease of 13% in the number of animals slaughtered at the Public Abattoir, although the number of pigs slaughtered increased. No cases of bovine T.B. were found in any animals but 5 Irish cattle (1.38%) were affected with cysticercosis. This compared with an incidence of 0.07% in cattle of English origin. By the end of the year the modernization of the abattoir was completed and the staff should be congratulated on their work under difficult conditions during the alterations.

The aftermath of the Floods, 10th/11th July 1968

Corporation officers gave help to Dr. Glin Bennet, Lecturer in Mental Health, University of Bristol, who made a controlled survey of the effects on health in the flooded districts. In the year following the floods there was a 50% increase in the number of deaths (especially from cancer) among those whose homes had been flooded, compared with people living in unaffected houses in the same district. Surgery attendances among those living in flooded properties rose by 53% and referrals to hospitals, and hospital admissions more than doubled. In all respects the men appeared less well able to cope with the experience of disaster than the women.

Health Centre Development

Southmead Health Centre serving a practice population of about 14,000 patients was completed in June 1969 and officially opened by The Right Honourable The Lord Mayor of Bristol, Alderman H. W. M. Willcox.

Work started in November 1969 on Horfield Health Centre with a population of 12,000 patients at risk and a health centre at Beechwood Road, Fishponds (population 13,500) was started in May 1970; the completion dates are November 1970 and July 1971 respectively.

Retirements

Mr. Thomas R. Bevan, employed in the Public Abattoir since 1935 and an efficient manager since 1938, retired in April.

Mr. Ivor Dembrey, Deputy Scientific Adviser since 1947, retired in June. Mr. Whittle contributes a note of appreciation in his section of the report and we are pleased to know that Mr. Dembrey continues professional work in the City.

Miss Gladys M. Grazier, who had been Senior Superintendent, Home Nursing, since 1951, retired in September. Before joining the staff of the Corporation in 1959 Miss Grazier had a distinguished career with the Queen's Institute for District Nursing including the establishment of a district nursing service in Malta and after the former Health Committee assumed direct responsibility for district nursing she was a very loyal member of the staff of the Corporation Community Nursing Services. Miss Grazier took a special interest in the mobile physiotherapy service of Bristol District Nursing Association and the allocation of grants from the Marie Curie Memorial Foundation for patients suffering from cancer. She continues as a member of the Frenchay Hospital Group Management Committee.

Mr. Alfred E. Meacham, who joined the staff of the Health Department in 1945, retired at the end of September. He played a vital part in the growth and development of the Department. Successively he was Staff Officer, Finance Officer and Deputy Chief Administrative Officer before holding the post of Chief Administrative Officer from December 1964. At their meeting on the 4th November the Social Services Committee placed on record their grateful thanks and appreciation for his service.

Mr. John Mountjoy, Special Public Health Inspector for the Health Education and Training Section, retired in May. He was a very lively character and his contributions to teaching were much appreciated.

Mr. Charles R. Turner, Chief Analytical Assistant since 1960, retired in March after over 50 years' service to the City.

Personal

Miss Annie E. Balsdon, Sister-in-Charge of St. George Health Centre, received the well-deserved honour of membership of the Order of the British Empire in the Birthday Honours List 1969. Miss Balsdon, who possesses all the best qualities of a Barts trained nurse, has worked with the Corporation since 1938 and was in charge of the William Budd Health Centre from 1959 until 1964. Her equable personality has helped general practitioners and local authority staff to work happily together and she has cheerfully shown round the health centres hundreds of officers and members of this and other local authorities and general practitioners from Britain and overseas. No one could have done more than Miss Balsdon to foster the cause of health centres.

I am grateful to the many contributors to this report, both named and un-named, and to the whole of the staff of the Department who have given me loyal and willing service. The Chairman and Vice-Chairman of the Social Services Committee have shown whole-hearted support and I greatly appreciate the help and guidance I have received from fellow Chief Officers. I am also indebted to my deputy, Dr. J. F. Skone, who has edited and collated this report.

I am your obedient servant,

R. C. WOFINDEN

SOCIAL SERVICES COMMITTEE 1969

CHAIRMAN

Alderman C. Hebblethwaite, C.B.E.

VICE-CHAIRMAN

Councillor Mrs. G. C. Barrow

ALDERMEN

Alderman G. G. Adams
Alderman Mrs. H. Bloom
Alderman Mrs. M. L. Deverell

Alderman Mrs. D. E. Prestridge
Alderman Rev. F. C. Vyvyan-Jones

COUNCILLORS

Councillor A. B. Abrams
Councillor Mrs. L. M. Alexander
Councillor W. E. Blackmore
Councillor Rev. P. W. P. Brook, M.A.
Councillor Mrs. M. E. Castle, O.B.E., J.P.
Councillor Mrs. B. L. Edwards
Councillor J. G. R. Fletcher

Councillor Dr. R. P. Golding
Councillor W. Graves
Councillor Mrs. F. L. Lawrence
Councillor H. Trapnell, M.A.
Councillor R. J. Trevis
Councillor G. H. W. Woodhouse

PRINCIPAL STAFF, 1969

MEDICAL OFFICER OF HEALTH AND SOCIAL SERVICES

R. C. WOFINDEN, M.D., M.R.C.P., D.P.H., D.P.A.

Deputy Medical Officer of Health : J. F. Skone, M.D., D.P.H., D.C.H., D.I.H.

Principal Welfare Services Officer : R. C. Travill, LL.B., D.P.A.

PRINCIPAL ASSISTANTS

Chief Assistant Medical Officer of Health and Senior Medical Officer for Mental Health :
H. Temple Phillips, M.D., D.P.H., D.C.H., D.I.H.

Senior Medical Officer—Maternal and Child Health : Sarah C. B. Walker, M.D., D.P.H.

Senior Medical Officer—School Health Service : A. L. Smallwood, M.D., D.P.H., D.C.H.

Senior Medical Officer—Epidemiology : A. J. Rowland, M.B., D.P.H.

Senior Medical Officer—Occupational Health : J. W. Markham, M.B., D.P.H., D.I.H.

(from 25th August)

Senior Medical Officer—Port : G. N. Febry, M.B., D.P.H.

Chief Dental Officer : J. McCaig, L.D.S., R.F.P.S.

Chief Public Health Inspector : G. J. Creech, M.B.E., C.St.J., F.R.S.H., M.A.P.H.I.

Chief Administrative Officer : A. E. Meacham (to 30th September)

R. L. Hillman, B.A., A.I.M.T.A. (from 27th October)

Chief Nursing Officer : Margaretta Marks Jones, S.R.N., S.C.M., H.V., N.A.C.

(Public Health)

PROFESSIONAL AND TECHNICAL OFFICERS

Chief Ambulance Officer : E. C. G. Joy (from 19th February)

Health Education Officer : P. Mackintosh, B.A.

Systems and Programming Assistant : B. A. Parker

Nutritionist : Margaret Chapman, S.R.D.

Senior Medical Social Worker : Marion Moncaster, A.M.I.M.S.W.

SCIENTIFIC ADVISER

E. G. Whittle, B.Sc., F.R.I.C.

VITAL STATISTICS & EPIDEMIOLOGY

A. J. Rowland

(Senior Medical Officer—Epidemiology)

A. M. George, M.B., Ch.B., D.P.H. (from 23rd June)

(First Assistant Medical Officer)

H. R. Cayton, M.B., Ch.B., F.C.Path.

(Director of the Public Health Laboratory, Bristol)

Miss C. H. Slowley

(Meteorological Officer, University of Bristol)

VITAL STATISTICS

		1969	1968	1967	1966	1965	1964
POPULATION	... ..	427,230	427,780	429,020	429,370	430,900	432,070
AREA IN ACRES	... ..	27,073	27,073	27,073	27,073	26,350	26,350
NUMBER OF MARRIAGES		3,872	3,980	3,786	3,933	3,657	3,600
LIVE BIRTHS							
Legitimate M.	2,920	5,776	6,032	6,261	6,587	6,859	6,852
F.	2,856						
Illegit. M.	369	686	699	742	714	741	665
F.	317						
Illegit. expressed as							
percentage of all births	...	10·6%	10·4%	10·6%	9·8%	9·7%	8·8%
Total Births	...	6,462	6,731	7,003	7,301	7,600	7,517
Live Birth Rate (Crude)	...	15·1	15·7	16·3	17·0	17·6	17·4
Adjusted Birth Rate	...	15·6	16·2	16·8	17·5	18·1	17·9
STILLBIRTHS							
Legitimate M.	34	67	96	79	98	109	82
F.	33						
Illegit. M.	6	13	7	12	11	11	11
F.	7						
Total Stillbirths	...	80	103	91	109	120	93
Stillbirth Rate	...	12·2	15·1	12·8	14·7	15·5	12·2
Total Live and Stillbirths	...	6,542	6,834	7,094	7,410	7,720	7,610
INFANT DEATHS							
Infant Mortality Rate—Total		16·2	17·1	16·8	17·3	21·6	18·4
„ Legit. Births		15·2	17·2	16·5	17·2	21·4	17·5
„ Illeg. Births		24·8	15·7	20·2	18·2	22·9	27·1
Neo-Natal Mortality Rate	...	10·2	11·1	12·3	11·8	14·5	11·8
Early Neo-Natal Mortality							
Rate	...	8·4	8·8	10·7	10·7	12·5	10·4
Peri-Natal Mortality Rate	...	20·5	23·7	23·4	25·2	27·8	22·5
MATERNAL DEATHS							
Number of deaths	...	1	4	—	4	2	2
Maternal Mortality Rate	...	0·15	0·59	—	0·54	0·26	0·26
DEATHS AT ALL AGES							
Male	2,747	5,425	5,329	5,044	5,426	5,311	5,141
Female	2,678						
Death Rate (Crude)	...	12·7	12·5	11·8	12·6	12·3	11·9
Adjusted Death Rate	...	12·1	11·8	11·1	11·7	11·6	11·5

TABLE 1

**TOTAL DEATHS OF BRISTOL CITIZENS BY CAUSE AND AGE,
REGISTERED DURING THE CALENDAR YEAR 1969**
(Compiled from figures supplied by the Registrar General)

CAUSE OF DEATH					Sex	Total at all ages	0-	1-	5-	15-	45-	65-	75+
All Causes					M	2,747	56	6	9	107	757	875	937
					F	2,678	49	7	10	55	405	639	1,513
Bacillary dysentery, amoebiasis					M	1	1	—	—	—	—	—	—
Enteritis and other diarrhoeal diseases					M	2	1	1	—	—	—	—	—
					F	3	1	1	—	—	—	—	1
Tuberculosis of respiratory system					M	4	—	—	—	1	2	1	—
Other tuberculosis, incl. late effects					M	5	—	—	—	—	1	1	3
Meningococcal infection					M	1	—	1	—	—	—	—	—
Malaria					M	1	—	—	—	1	—	—	—
Other infective and parasitic diseases					M	7	3	—	—	1	3	—	—
					F	8	1	2	—	1	1	—	3
Malignant neoplasms, buccal cavity, etc.					M	11	—	—	—	—	3	4	4
					F	4	—	—	—	—	2	—	2
Malignant neoplasm, oesophagus					M	25	—	—	—	—	10	9	6
					F	16	—	—	—	1	5	4	6
Malignant neoplasm, stomach					M	64	—	—	—	1	24	22	17
					F	61	—	—	—	1	10	22	28
Malignant neoplasm, intestine					M	79	—	—	—	—	16	33	30
					F	84	—	—	—	4	16	27	37
Malignant neoplasm, larynx					M	10	—	—	—	—	3	5	2
Malignant neoplasm, lung, bronchus					M	257	—	—	—	4	105	107	41
					F	45	—	—	—	—	10	21	14
Malignant neoplasm, breast					F	91	—	—	—	5	35	25	26
Malignant neoplasm, uterus					F	39	—	—	—	2	18	10	9
Malignant neoplasm, prostate					M	35	—	—	—	—	4	11	20
Leukaemia					M	13	—	—	2	1	3	3	4
					F	16	—	—	1	2	5	3	5
Other malignant neoplasms					M	115	—	—	1	7	52	31	24
					F	140	—	—	3	4	47	48	38
Benign and unspecified neoplasms					M	7	—	—	—	2	3	1	1
					F	5	—	1	—	1	2	1	—
Diabetes mellitus					M	21	—	—	—	2	2	10	7
					F	28	—	—	—	—	5	6	17
Avitaminoses, etc.					M	1	—	—	—	—	—	—	1
					F	2	—	—	—	—	—	1	1
Other endocrine etc. diseases					M	6	—	—	2	—	2	2	—
					F	8	—	—	—	—	2	3	3
Anaemias					M	5	—	—	—	—	—	2	3
					F	14	—	—	—	1	—	3	10
Other diseases of blood, etc.					M	1	—	—	—	—	1	—	—
Mental disorders					M	4	—	—	—	2	2	—	—
					F	7	—	—	—	1	2	1	3
Meningitis					F	1	—	—	1	—	—	—	—
Other diseases of nervous system, etc.					M	21	—	—	—	4	4	6	7
					F	32	2	1	1	4	9	9	6
Chronic rheumatic heart disease					M	21	—	—	—	1	14	3	3
					F	49	—	—	—	4	18	14	13
Hypertensive disease					M	45	—	—	—	1	13	16	15
					F	63	—	—	—	—	11	13	39
Ischaemic heart disease					M	810	—	—	—	17	265	269	259
					F	539	—	—	—	—	59	166	314
Other forms of heart disease					M	78	—	—	—	1	9	24	44
					F	172	—	—	1	2	7	24	138
Cerebrovascular disease					M	290	—	—	—	3	55	88	144
					F	472	—	—	—	4	41	95	332
Other diseases of circulatory system					M	96	—	—	—	2	11	33	50
					F	172	—	—	—	—	13	32	127
Influenza					M	21	—	—	—	1	4	9	7
					F	22	—	—	—	1	6	4	11
Pneumonia					M	162	7	—	—	4	18	38	95
					F	235	8	—	—	1	23	35	168
Bronchitis and emphysema					M	225	1	—	—	1	59	80	84
					F	71	—	—	—	—	12	23	36
Asthma					M	7	—	—	—	1	4	2	—
					F	4	—	—	—	1	2	1	—
Other diseases of respiratory system					M	22	1	—	1	1	6	10	3
					F	28	4	1	—	2	5	3	13
Peptic ulcer					M	27	—	—	—	—	5	12	10
					F	21	—	—	—	1	3	5	12
Appendicitis					M	2	—	—	—	—	1	—	1
					F	3	—	—	—	—	—	—	3
Intestinal obstruction and hernia					M	11	—	—	—	—	2	3	6
					F	14	1	—	—	—	1	4	8

CAUSE OF DEATH						Sex	Total at all ages	0-	1-	5-	15-	45-	65-	75+
Cirrhosis of liver	...	...	...	...	...	M	8	—	—	—	1	2	3	2
						F	6	—	—	—	—	2	3	1
Other diseases of digestive system	...	...	...	...	...	M	21	—	—	—	1	6	7	7
						F	35	1	—	—	1	4	7	22
Nephritis and nephrosis	...	...	...	...	...	M	7	—	1	—	3	2	—	1
						F	9	—	—	1	—	2	3	3
Hyperplasia of prostate	...	...	...	...	...	M	10	—	—	—	—	1	3	6
Other diseases of genito-urinary system	...	...	...	...	...	M	16	1	—	—	1	4	3	7
						F	22	—	—	—	1	4	4	13
Other complications of pregnancy, etc.	...	...	...	...	...	F	1	—	—	—	1	—	—	—
Diseases of skin, subcutaneous tissue	...	...	...	...	...	M	2	—	—	—	—	—	1	1
						F	5	—	—	—	—	—	2	3
Diseases of musculo-skeletal system	...	...	...	...	...	M	4	—	—	—	—	3	—	1
						F	15	—	—	—	1	3	2	9
Congenital Anomalies	...	...	...	...	...	M	31	22	—	1	2	4	1	1
						F	12	11	—	—	—	—	1	—
Birth injury, difficult labour, etc.	...	...	...	...	...	M	16	16	—	—	—	—	—	—
						F	11	11	—	—	—	—	—	—
Other causes of perinatal mortality	...	...	...	...	...	M	1	1	—	—	—	—	—	—
						F	7	7	—	—	—	—	—	—
Symptoms and ill-defined conditions	...	...	...	...	...	M	4	—	—	—	—	—	1	3
						F	2	—	—	—	—	—	1	1
Motor vehicle accidents	...	...	...	...	...	M	45	—	2	—	18	15	8	2
						F	14	—	—	1	5	3	4	1
All other accidents	...	...	...	...	...	M	36	2	1	2	11	4	4	12
						F	50	2	1	1	1	7	5	33
Suicide and self-inflicted injury	...	...	...	...	...	M	21	—	—	—	9	6	5	1
						F	14	—	—	—	—	7	3	4
All other external causes	...	...	...	...	...	M	12	—	—	—	2	4	4	2
						F	6	—	—	—	2	3	1	—

TABLE 2

CAUSES OF DEATH REGISTERED DURING THE CALENDAR YEAR 1969

(Compiled from figures supplied by the Registrar General)

Death Rate per million population	Cause of Death		No. of Deaths 1969	Percentage of total deaths
2	Bacillary dysentery, amebiasis	...	1	0.0
12	Enteritis and other diarrhoeal diseases	...	5	0.1
9	Tuberculosis of respiratory system	...	4	0.1
12	Other tuberculosis, including late effects	...	5	0.1
2	Meningococcal infection	...	1	0.0
2	Malaria	...	1	0.0
35	Other infective and parasitic diseases	...	15	0.3
35	Malignant neoplasm—buccal cavity etc.	...	15	0.3
96	Malignant neoplasm—oesophagus	...	41	0.8
293	Malignant neoplasm—stomach	...	125	2.3
382	Malignant neoplasm—intestine	...	163	3.0
23	Malignant neoplasm—larynx	...	10	0.2
707	Malignant neoplasm—lung, bronchus	...	302	5.6
213	Malignant neoplasm—breast	...	91	1.7
91	Malignant neoplasm—uterus	...	39	0.7
82	Malignant neoplasm—prostate	...	35	0.6
68	Leukaemia	...	29	0.5
597	Other malignant neoplasms	...	255	4.7
28	Benign and unspecified neoplasms	...	12	0.2
115	Diabetes mellitus	...	49	0.9
7	Avitaminoses, etc.	...	3	0.1
33	Other endocrine etc. diseases	...	14	0.3
44	Anaemias	...	19	0.4
2	Other diseases of blood, etc.	...	1	0.0
26	Mental disorders	...	11	0.2
2	Meningitis	...	1	0.0
124	Other diseases of nervous system, etc.	...	53	1.0
164	Chronic rheumatic heart disease	...	70	1.3
253	Hypertensive disease	...	108	2.0
3,158	Ischaemic heart disease	...	1,349	24.9
585	Other forms of heart disease	...	250	4.6
1,784	Cerebrovascular disease	...	762	14.0
627	Other diseases of circulatory system	...	268	4.9
101	Influenza	...	43	0.8
929	Pneumonia	...	397	7.3
693	Bronchitis and emphysema	...	296	5.5

<i>Death Rate per million population</i>	<i>Cause of Death</i>	<i>No. of Deaths 1969</i>	<i>Percentage of total deaths</i>
26	Asthma	11	0.2
117	Other diseases of respiratory system	50	0.9
112	Peptic ulcer	48	0.9
12	Appendicitis	5	0.1
59	Intestinal obstruction and hernia	25	0.5
33	Cirrhosis of liver	14	0.3
131	Other diseases of digestive system	56	1.0
37	Nephritis and nephrosis	16	0.3
23	Hyperplasia of prostate	10	0.2
89	Other diseases of genito-urinary system	38	0.7
2	Other complications of pregnancy, etc.	1	0.0
16	Diseases of skin, subcutaneous tissue	7	0.1
44	Diseases of musculo-skeletal system	19	0.4
101	Congenital anomalies	43	0.8
63	Birth injury, difficult labour, etc.	27	0.5
19	Other causes of perinatal mortality	8	0.1
14	Symptoms and ill-defined conditions	6	0.1
138	Motor vehicle accidents	59	1.1
201	All other accidents	86	1.6
82	Suicide and self-inflicted injuries	35	0.6
42	All other external causes	18	0.3
12,698	ALL CAUSES	5,425	100.0

NOTE: 0.0 denotes less than 0.05 per cent.

TABLE 3

INFANT MORTALITY (Local figures, corrected for transfers)

<i>Total 1968</i>	<i>Cause of Death</i>	<i>Total 1969</i>	<i>First Day</i>	<i>From one day to under one week</i>	<i>From one week to under four weeks</i>	<i>Total under four weeks</i>	<i>Total from one month to under one year</i>
—	Bacillary dysentery, amoebiasis ...	1	—	—	—	—	1
6	Enteritis and other diarrhoeal diseases	2	—	—	—	—	2
—	Other infective and parasitic diseases	4	—	—	1	1	3
19	Pneumonia	15	—	—	3	3	12
21	*Congenital anomalies	33	8	7	7	22	11
37	*Birth injury, difficult labour and other anoxic and hypoxic conditions ..	27	11	15	1	27	—
13	*Other causes of perinatal mortality ...	8	1	7	—	8	—
—	All accidents	4	1	—	—	1	3
18	All other causes	11	4	—	—	4	7
114	TOTALS	105	25	29	12	66	39
Rate per 1,000 live births (1969) ...		16.2	3.9	4.5	1.9	10.2	6.0
Rate per 1,000 live births (1968) ...		16.9	4.6	4.0	2.4	11.0	5.9
*Where there has been mention of prematurity				1969 ...	32		
				1968 ...	31		
				1967 ...	48		
1969 infant deaths in:				Hospitals	85	(includes 8 in hospitals outside Bristol)	
				Private nursing homes	Nil		
				Private residence, ambulances, etc.	20		

TABLE 4
INFECTIOUS DISEASES NOTIFIED DURING 1969

NOTIFIABLE DISEASE	At all ages			Under one	Incidence by age groups (1969)					Incidence by quarters of 1969				
	1967	1968	1969		1-4	5-14	15-24	25-44	45-64	65+	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Malaria ...	...	...	3	—	—	—	2	—	1	—	1	—	1	1
Scarlet Fever ...	324	128	176	1	55	107	11	2	—	—	80	39	17	40
Acute Encephalitis ...	3	—	1	—	—	1	—	—	—	—	—	—	—	1
Paratyphoid ...	...	...	3	—	—	1	—	2	—	—	—	—	3	—
Typhoid ...	...	...	3	—	—	—	2	1	—	—	—	—	1	2
Meningococcal Infection ...	...	6	5	1	3	1	—	—	—	—	2	3	—	—
Infective jaundice ...	487	278	217	—	22	94	38	46	8	9	45	46	37	89
Glandular fever ...	...	152	107	1	2	20	75	6	3	—	26	25	24	32
Dysentery ...	824	197	502	20	210	145	34	75	15	3	28	197	154	123
Food poisoning (Confirmed cases) ...	82	41	146	13	31	19	28	36	14	5	10	19	84	33
Measles ...	3,721	933	1,462	64	866	520	11	1	—	—	706	389	266	101
Rubella ...	1,356	3,325	912	52	252	462	99	47	—	—	182	460	207	63
Whooping cough ...	333	261	21	3	14	4	—	—	—	—	11	4	3	3
Ophthalmia neonatorum ...	...	13	3	3	—	—	—	—	—	—	1	1	—	1

TABLE 5

TUBERCULOSIS NOTIFICATIONS

				CASES												65 and over
				Sex	At All Ages	Un- der one	1-	5-	10-	15-	20-	25-	35-	45-	55-	
1969 :—																
<i>Pulmonary Tuberculosis</i>																
New notifications	...	...	...	M	41	—	—	—	—	3	2	4	9	8	6	9
				F	19	—	2	—	—	1	2	5	2	4	—	3
Transfers from other areas	...	...	...	M	11	—	—	—	—	—	—	4	3	3	—	1
				F	3	—	—	—	—	—	—	1	2	—	—	—
Deaths mentioning Tuberculosis, not notified	...	...	...	M	2	—	—	—	—	—	—	—	—	—	1	1
				F	—	—	—	—	—	—	—	—	—	—	—	—
<i>Non-pulmonary Tuberculosis</i>																
New notifications	...	...	...	M	10	—	—	—	—	1	1	4	2	1	1	—
				F	7	—	—	—	2	—	—	2	1	—	1	1
Transfers from other areas	...	...	...	M	—	—	—	—	—	—	—	—	—	—	—	—
				F	—	—	—	—	—	—	—	—	—	—	—	—
Deaths mentioning Tuberculosis, not notified	...	...	...	M	1	—	—	—	—	—	—	—	—	—	—	1
				F	—	—	—	—	—	—	—	—	—	—	—	—
<i>New Notifications—</i>																
<i>Pulmonary—</i>																
1968	...	...	...	M	53	1	3	—	—	3	4	6	7	9	10	10
				F	25	—	—	—	2	1	2	6	3	8	2	1
1967	...	...	...	M	42	—	—	3	1	2	2	8	7	1	6	12
				F	26	—	2	1	1	5	1	4	4	3	2	3
1966	...	...	...	M	47	—	—	—	—	—	4	5	7	10	11	10
				F	29	—	—	—	1	1	7	5	3	3	6	3
1965	...	...	...	M	61	—	—	—	—	2	7	12	8	9	13	10
				F	26	—	—	—	—	3	3	2	4	5	4	5
1964	...	...	...	M	108	—	1	—	2	4	7	22	16	17	20	19
				F	41	—	1	—	1	2	5	8	7	7	6	4
<i>Non-Pulmonary—</i>																
1968	...	...	...	M	5	—	—	1	—	—	1	2	—	—	1	—
				F	6	—	—	—	—	—	—	3	2	1	—	—
1967	...	...	...	M	7	—	1	1	—	—	—	1	2	1	1	—
				F	8	—	—	—	—	—	—	4	2	—	—	2
1966	...	...	...	M	3	—	—	—	—	—	—	—	—	2	1	—
				F	10	—	—	—	—	—	1	4	2	—	3	—
1965	...	...	...	M	5	—	—	—	—	2	—	—	1	—	2	—
				F	7	—	—	—	—	—	1	1	2	3	—	—
1964	...	...	...	M	10	—	—	—	—	—	2	3	4	1	—	—
				F	10	—	1	—	—	—	1	4	2	1	—	1

TABLE 6

ANALYSIS OF IMMUNOLOGICAL COURSES COMPLETED DURING 1968/1969

	1968				1969			
	Under 5 yrs.	5-15 yrs.	Total under 16 yrs.	Administered by Local Auth'y. G.P.	Under 5 yrs.	5-15 yrs.	Total under 16 yrs.	Administered by Local Auth'y. G.P.
Diphtheria (whether combined with others or not)								
Primary Course	...	...	6,011	3,091	3,230	266	6,463	3,782
Booster	...	...	4,814	3,020	3,906	3,307	8,199	4,743
Whooping Cough (combined or not)								
Primary Course	...	...	5,873	170	2,949	138	6,201	3,634
Booster	...	...	4,108	935	2,327	1,191	5,205	2,768
Tetanus (combined or not)								
Primary Course	...	...	6,045	498	3,111	531	6,753	3,898
Booster	...	...	4,880	3,397	4,308	3,684	8,634	4,812
Poliomyelitis								
Primary Course	...	...	5,447	579	3,034	364	6,106	3,473
Booster	...	...	4,682	2,139	3,627	3,354	7,805	4,585
Measles	...	...	3,986	3,053	5,418	439	3,340	1,924
								1,416
	1968				1969			
	Under 1 yr.		Total under 16 yrs.		Under 1 yr.		Total under 16 yrs.	
	One yr.	2-4 yrs.	5-15 yrs.	Administered by L.A. G.P.	One yr.	2-4 yrs.	5-15 yrs.	Administered by L.A. G.P.
Smallpox								
Primary	19	2,481	824	379	3,701	1,504	2,197	1,591
Revacc.	—	94	339	463	896	117	779	178
								2,191
								763

MORTALITY

There were 5,425 deaths registered in Bristol citizens during 1969. This gave a crude death rate of 12·7 per thousand mid-year population, and an adjusted rate of 12·1 per thousand.

As usual, the principal causes of death were ischaemic heart disease, malignant neoplasms, cerebrovascular disease, and respiratory disease. Table 7 shows this year's rates in comparison with those of 1968 :

Table 7
PRINCIPAL CAUSES OF DEATH

<i>Cause of death</i>			<i>No.</i>	<i>Crude death rate per thousand</i>	<i>Percentage of total deaths</i>	<i>1968</i>	
						<i>Rate</i>	<i>%</i>
Ischaemic heart disease	...	...	1,349	3·2	24·9	3·2	25·3
Malignant neoplasms	...	...	1,105	2·6	20·4	2·4	19·6
Cerebrovascular disease	...	...	762	1·8	14·0	1·8	14·0
Respiratory disease ..	...	...	797	1·9	14·7	2·0	16·4
(excluding cancer)							

DEATHS FROM VIOLENCE IN BRISTOL

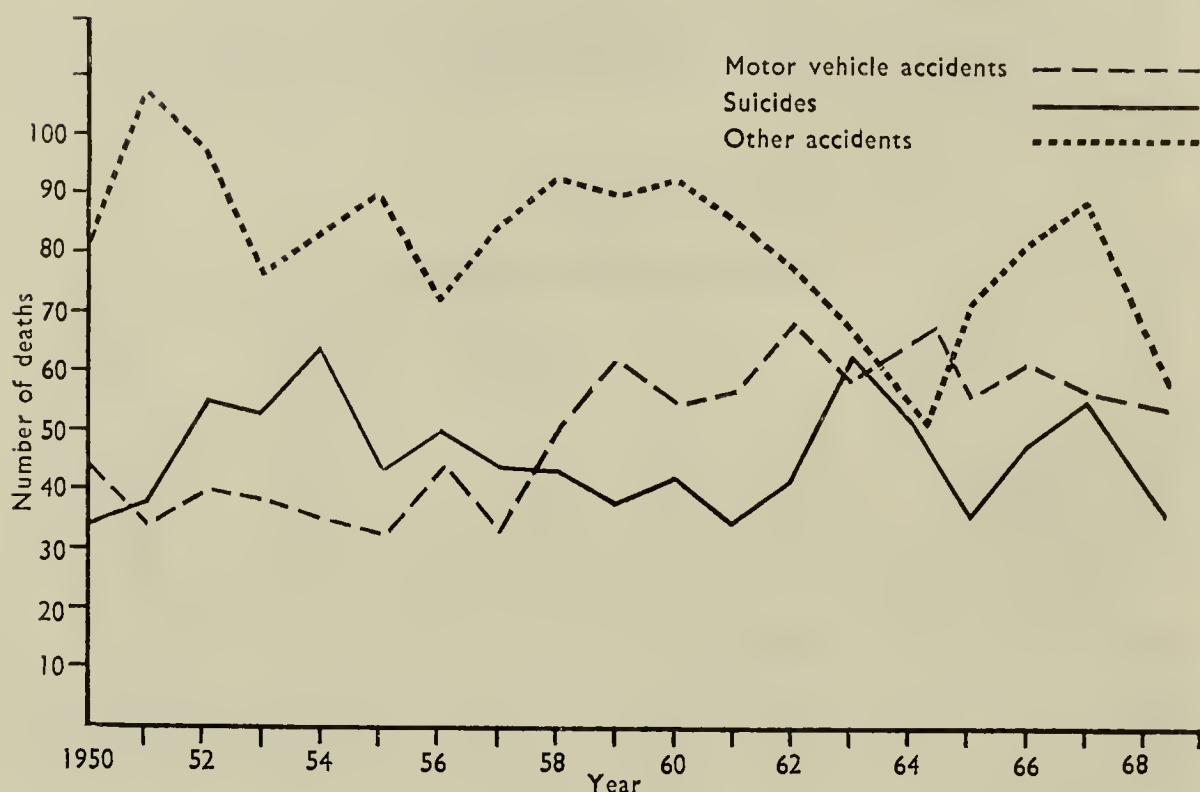
Deaths from violence include those due to homicide, suicide, and accident. Accidents may occur in the home, at work, or on the road. In the past, statistics held in this department have only differentiated between road and 'other' accidents, although the majority of the latter category will be home accidents.

Table 8 shows the total number of deaths attributed to violence during each of the years since 1950.

Table 8
DEATHS IN BRISTOL CITIZENS DUE TO VIOLENCE

1950	163	1960	191
1951	185	1961	180
1952	195	1962	186
1953	170	1963	197
1954	188	1964	175
1955	167	1965	166
1956	168	1966	193
1957	168	1967	203
1958	193	1968	163
1959	193	1969	198

Figure 1—Violent deaths in Bristol 1950–1959 (excluding homicide)



There has been remarkably little variation in mortality from these causes during the past two decades. When the contributions to the total made by the different categories of violence are examined, it is seen that there has similarly been little overall change except for a slight rise in the number of road deaths, probably attributable to the increase in traffic density in the city during this time (see figure 1).

1969, with 198 deaths due to violence, is thus a sadly typical year. There were 49 deaths in the home, 59 deaths on the roads, and 2 deaths due to homicide. In addition, 35 persons died by their own hand. It is a remarkable and salutary thought that it is possible to predict, with a reasonable degree of accuracy, how many persons who are alive and well at the beginning of a year will have met their deaths by violence by the end of it.

The absence of any improvement in the loss of life in this city from violent causes over the past twenty years indicates that so far our efforts at prevention have been ineffective. There is a great need for more research into the causes of accidents, and training and education in ways of avoiding accident situations.

Table 9
BRISTOL SUICIDES 1968 and 1969

Age group	Males		Females		Persons	
	1968	1969	1968	1969	1968	1969
Under 20	1	1	2	0	3	1
20-29	3	5	1	0	4	5
30-39	4	3	3	1	7	4
40-49	1	3	3	1	4	4
50-59	3	1	2	4	5	5
60-69	6	5	4	4	10	9
70-79	3	3	1	4	4	7
80-	2	2	0	1	2	3
Totals	23	23	16	15	39	38

Table 10

METHODS OF SUICIDE 1968 and 1969

Method used	Males		Females		Persons	
	1968	1969	1968	1969	1968	1969
Poisoning: Aspirin	1	1	0	0	1	1
Barbiturates/Narcotics ..	4	3	7	6	11	9
Other solids	0	0	0	1	0	1
Coal gas	8	8	4	7	12	15
Other CO gas	4	0	0	0	4	0
Falls	1	4	2	1	3	5
Drowning	2	1	0	0	2	1
Hanging	2	2	2	0	4	2
Sharp instrument	1	2	1	0	2	2
Gunshot	0	1	0	0	0	1
Fall before vehicle	0	1	0	0	0	1

The figures for suicides this year show no significant change from those of 1968. Coal gas poisoning accounted for by far the largest proportion (40%).

INFECTIOUS DISEASES DUE TO BACTERIA

Tuberculosis

There was a further fall in the number of new cases of tuberculosis notified. There were 60 cases of pulmonary tuberculosis, and 17 cases of non-pulmonary tuberculosis—a total of 77, compared with 89 in 1968.

New notifications in young persons are of particular interest, as these may be indicators of continuing foci of infection, whereas the cases arising in older persons are mainly the heritage of cross infection in past years. This year there were only six new cases of pulmonary tuberculosis in persons under the age of 20 years. This represents 7·7% of total notifications, as compared with 11·5% in the previous year. There were also three cases of non-pulmonary tuberculosis in this group. Details are shown in Table 11.

Table 11

NOTIFICATIONS OF TUBERCULOSIS IN PERSONS AGED LESS THAN 20 YEARS

	0—	5—	10—	15—19	Total
Pulmonary	2	0	0	4	6
Non-pulmonary	0	0	2	1	3

Scrutiny of these cases has not revealed an identifiable source of infection, but of the cases of pulmonary tuberculosis, the circumstances are such that in only one case—a child of three—is infection likely to have occurred in Bristol. Infection could also have been acquired here in one of the non-pulmonary cases. The totals include four cases of pulmonary tuberculosis, and one case of non-pulmonary tuberculosis, in immigrants under the age of 20.

Whooping Cough

The incidence of this disease appears to be surprisingly low this year, even allowing for possible under-notification. In recent years the emergence of one particular strain of *Bordetella pertussis* as a cause of whooping cough has been noticed, and from 1967 onwards, some vaccines were modified so that this strain was adequately represented in them. The steady reduction of the incidence of whooping cough may well be due to the use of these improved vaccines. The pattern in Bristol is representative of that in the country as a whole (figure 2).



Meningococcal Infection

There were five cases notified; this shows no significant change on the previous year. All cases were investigated. No secondary cases were identified.

Scarlet Fever

There were 176 notifications in 1969, an incidence very similar to that of the previous year.

Gastro-intestinal Infections due to Bacteria

Dysentery

There were 502 notified cases of dysentery, an increase of 305 over the previous year, although this is well within the range of the previous ten years.

During 1969, a change was made in the way in which cases of dysentery are investigated. It has always been the practice to visit households where cases have occurred, with the object of identifying any specific public health risk. Such a risk might be a member of the family who works in a hospital ward, or in the food trade. If these persons become unwitting excretors of the dysentery bacillus, the results could be serious. When homes are visited, such individuals are identified and placed under surveillance, and if transmission of infection occurs they are asked to discontinue their work until they no longer represent a hazard, under the terms of the Public Health (Infectious Diseases) Regulations 1968.

These domiciliary visits have for many years been carried out by public health inspectors. There have been certain disadvantages associated with this method of working—the inspectors are not medically qualified, and have sometimes experienced difficulty in approaching housewives for medical information and specimens, and in explaining methods of controlling cross-infection in the home. Accordingly, since November 1969, the bulk of this work has been undertaken by two infectious diseases nurses. They work in direct liaison with the medical officers in the epidemiology section and are better able to deal with the more medical aspects of the investigation. They are also able to obtain pathological specimens such as throat swabs, should these be required.

The inspectors are, however, still concerned where a possible food link exists, and also provide some reserve in case the nurses are overwhelmed by an unusually large number of notifications.

Food Poisoning

The majority of cases of food poisoning are attributed to salmonella infection. This year has been quite remarkable for the number of notifications and the number of different serotypes isolated. Throughout the year very careful observation was maintained in an effort to identify common sources, but, as is plain from an examination of the table below, the large number of cases was linked more with the variety of the organisms involved than with any other characteristic.

Table 12

SALMONELLAE ISOLATED IN BRISTOL IN 1969

Salmonella typhimurium	36
panama	29
4:12:d	19
indiana	10
agama	9
dublin	5
stanley	4
montevideo	4
meunchen	3
enteritidis	3
infantis	3
haifa	2
newport	2
st. paul	2
heidelberg	2
oranienburg	2
others*	11
	<hr/>
	146

* one each of : *S. kapenba*, *S. bovis morbificans*, *S. epicrates*, *S. anatum*, *S. thompson*, *S. bredeney*, *S. senftenburg*, *S. minnesota*, *S. livingstone*, *S. isangi*, *S. brandenburg*.

There was also one case of "toxin" food poisoning.

A high proportion of the cases of *S. indiana* infection were traced to frozen chicken sold in one particular shop. Two members of the staff were found to be carrying this organism, and were immediately taken off work until they were cleared of infection. Although there were 29 cases of *S. panama* infection during the year, no common food factor was identified in spite of careful investigation and frequent review.

Although the number of cases reported this year is relatively high, it is not exceptionally so. There were 146 cases in 1965, and 240 in 1963.

Typhoid Fever

Three cases of typhoid fever were notified in 1969. The first was a 17-year-old schoolboy who fell ill at the end of August soon after his return from a holiday in the south of France. He spent a month in Ham Green Hospital and responded well to treatment.

The other two cases were in women who had travelled to Britain from Australia in the ship 'Angelina Laura'.

One of these was a 20-year-old who had been becoming progressively more unwell over a period of a month. Her family doctor reported this to the Health Department because of press publicity about other cases associated with the ship, and as a result she was admitted to Ham Green Hospital on 20th November. The diagnosis was confirmed bacteriologically soon after admission. She responded well to treatment, and was eventually discharged some seven weeks later.

The second was a married woman of 27 who was in an advanced state of pregnancy. She also was admitted to hospital on 20th November, and the diagnosis was bacteriologically confirmed. While under treatment, she gave birth to a healthy girl. In spite of treatment, she continued to excrete the typhoid bacillus, and was eventually discharged and placed under surveillance as a carrier nine weeks after her admission. Her family has been protected with T.A.B. vaccine.

Paratyphoid Fever

Of the three cases of paratyphoid infection notified this year, two were in the same immigrant family. The other case was in a young woman, and came to light as a result of examining Bristol residents who had been in an hotel in southern Spain where cases had occurred. This young lady was free of symptoms, and treatment was successfully undertaken at home by the family doctor. The family was kept under surveillance but there was no evidence of cross infection.

Earlier in the year a thirteen-year-old Pakistani schoolboy became ill and was eventually admitted to Ham Green Hospital where *Salmonella paratyphi A* was isolated from blood culture. Investigation of the family revealed that his mother was an asymptomatic carrier of the organism.

All persons who are diagnosed as cases of typhoid or paratyphoid infection are placed under prolonged surveillance even if they are reported as negative after treatment, and remain under surveillance permanently if they are carriers. This latter precaution ensures that such persons do not unwittingly take up a potentially dangerous occupation.

Apart from the cases reported above, the department spent a great deal of time tracing and examining persons who had been on holiday in places where cases of typhoid or paratyphoid fever had occurred. There were several outbreaks associated with continental holiday resorts during the year, and this led to an accentuated demand for T.A.B. inoculation during the summer months, the effects of which are reported in the appropriate section (see page). In all, 22 primary contacts—3 of paratyphoid and 19 of typhoid—were investigated, and a further 9 persons who were ill in suspicious circumstances were also investigated.

It is intended to mount a publicity campaign during 1970 in an attempt to persuade more people to ensure that they are adequately protected in good time before they go abroad. This would reduce last minute 'panic' demands for inoculation when cases of enteric fever begin to arise in returning holiday makers, and would also reduce the risks to Bristolians travelling abroad.

INFECTIOUS DISEASES DUE TO VIRUSES

Influenza

The recognition of an antigenic shift in the A2 virus during 1968 led to the expectation of a much increased incidence of influenza during the succeeding winter, and as recorded in my report for 1968, key members of staff were given influenza vaccine. In the event, and despite reports of widespread outbreaks in other countries, the expected epidemic did not materialise here in the winter of 1968-69. During the first quarter of this year, nine deaths attributable to influenza were reported, the mortality from respiratory disease was not unduly increased, and sickness benefit claims showed no more than the usual seasonal rise.

However, there was a sudden increase in winter illness during December. General practitioners were reporting influenza-like illnesses in their patients by the middle of the month, and the first isolation of the A2 virus in the winter 1969-70 was made in Bristol on December 12th. During the last week of the year there was a dramatic increase in illness, including influenza, and sickness benefit claims showed a sharp rise in the weeks immediately before and after Christmas. There was a corresponding rise in mortality, and during the last twelve days of 1969, 29 deaths occurred which were attributed to influenza, and 65 attributed to pneumonia. At the turn of the year, the city was experiencing an epidemic of influenza of moderate intensity.

Many large firms were reporting that between ten and fifteen per cent of their workers were off sick, and doctors were reporting that they were being kept very busy with calls. The disease was relatively mild, but tended to be followed by secondary infection in many cases.

Measles

Notifications, totalling 1,462, exceeded the previous year's total by 529, but none-the-less, this was a low figure for what would normally have been a 'measles year'. The change in the occurrence of the disease in recent years is evident from the graph (figure 3).



Measles following vaccination against the disease was reported in fifteen cases. Although the majority were children who had received killed followed by live vaccine in 1966 and 1967, in four cases a single dose of live vaccine had been given in 1968.

Rubella

There were considerably fewer notifications of rubella, 912, as compared with 3,325 during the previous year. Over 50% of the year's total cases occurred during the second quarter (table 4).

During 1968, 43 mothers came to notice who were in contact with, or developed, rubella during their pregnancy. The outcome of these pregnancies was recorded, and a follow-up of the children carried out with the help of health visitors during 1969.

Table 13
Outcome of 1968 pregnancies in contact with rubella

<i>Mother</i>	<i>Infant lost</i>			<i>Infant normal at birth and follow-up</i>	<i>Totals</i>
	<i>T</i>	<i>M</i>	<i>S</i>		
Had rubella*	2	—	—	4	6
In contact with rubella*	2	2	1	27†	32
Not traced	—	—	—	—	5

T = pregnancy terminated
M = miscarriage
S = stillbirth

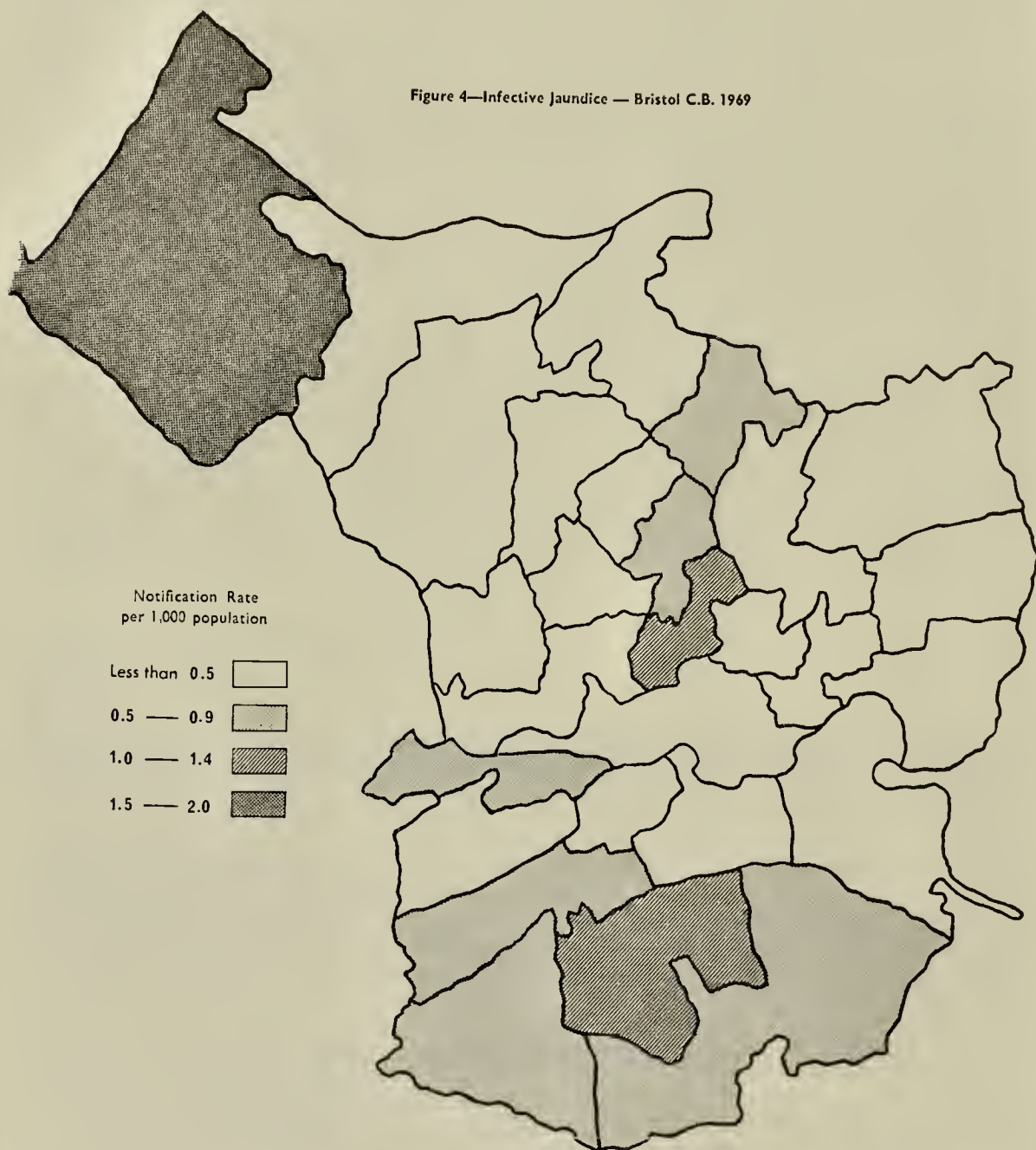
* clinical diagnosis
† 1 child had prolonged neo-natal jaundice

Infective Jaundice

There were 217 cases of infective jaundice during the year, fewer even than in 1968, which was regarded as a 'quiet' year. All cases were due to infectious hepatitis, and no serious complications or deaths were reported.

Following the occurrence of six cases of infective hepatitis amongst children attending the Bush Junior Training Centre, a medical officer visited and administered gamma-globulin to 37 close contacts at the end of June. No further cases of hepatitis were reported in this group of children, and no cases occurred elsewhere in the training centre.

Figure 4—Infective Jaundice — Bristol C.B. 1969



As will be seen from Table 4, the incidence of the disease was distributed fairly evenly in the first three quarters of the year, but there was an increase in notifications during the last quarter.

Table 14 shows Bristol's experience of this disease since it was first made notifiable in 1961, and figure 4 illustrates this year's distribution in the city.

Table 14

Infective Jaundice Bristol C.B.

<i>Year</i>	<i>Children 0-14</i>	<i>Adults 15 and over</i>	<i>Totals</i>
1961	738	222	960
1962	183	105	288
1963	38	74	112
1964	63	54	127
1965	179	109	288
1966	331	225	556
1967	305	182	487
1968	157	121	278
1969	116	101	217

Enterovirus Infections

Aseptic Meningitis

Twelve Bristol residents were admitted to Ham Green Hospital during the year. All but two were aged over ten years, and only one was aged over 20. Five yielded Echo 6 virus, and one Coxsachie A9.

The Bristol Public Health Laboratory isolated 106 enteroviruses during the year. More than half the isolations were from cases of virus meningitis. There was also a small outbreak of hand foot and mouth disease in the city, and isolations of Coxsachie A virus were made from 15 of these cases.

Echo viruses isolated		Coxsachie viruses isolated	
<i>Virus</i>	<i>No. of isolations</i>	<i>Virus</i>	<i>No. of isolations</i>
Echo 6	35	Coxsachie A	21
Echo 9	23	Coxsachie B	5
Echo 25	5	Total	26
Echo 17	4		
Echo 30	4		
Echo 14	3		
Echo 20	1		
Echo 19	1		
Echo 16	1		
Echo 22	1		
Total	78		

Two enteroviruses isolated remain unidentified.

Table 15

Cases from which enteroviruses were isolated

	<i>0-4</i>	<i>5-14</i>	<i>15 and over</i>	<i>N.K.</i>	<i>All ages</i>
Meningitis	6	28	23	1	58
Hand foot and mouth disease	12	0	3	0	15
Other	22	7	4	0	33

Amongst the miscellaneous group were four cases of Bornholm disease, from three of which echo viruses were grown for the first time in Bristol.

All but two of these enterovirus isolations were made from June onwards, demonstrating the well-known characteristic of these viruses to become more prevalent during the second half of the year.

Glandular Fever

There were 107 notifications of this disease. This compares with 152 in the previous year, and 162 in the year before that.

Table 16
NOTIFICATIONS OF GLANDULAR FEVER 1963—69

Year	0—4	5—14	15—24	25 and over	All ages
1963	3	31	67	18	119
1964	4	12	105	21	142
1965	6	34	101	13	154
1966	3	15	88	12	118
1967	11	35	101	15	162
1968	6	28	101	17	152
1969	3	20	75	9	107

OTHER CONDITIONS

Scabies

Fewer cases of scabies were reported this year: 42 family infestations came to the notice of the department. An attempt was made to follow up each report in order to establish that all members of the family were treated, regardless of whether they had symptoms, and to enquire for any other contacts that might need attention. Four to six weeks later, a further visit was made to ensure that the infestation had been eradicated. The necessary visits were carried out by health visitors.

During 1969 follow-up was achieved in 33 cases. In these families, 25 of 64 male family contacts, and 29 of 75 female contacts, had evidence of cross-infestation, but no relapses occurred following treatment, which was almost exclusively with 1% gamma benzene hexachloride cream.

Sources of reports

From general practitioners:	
(a) through hospital O.P.D's	13
(b) direct or through H.V.'s	12
From school clinics or inspections	5
From clinics (spontaneous attendance)	2
From health visitors	3
Others	7

In the majority of cases investigated no inference could be made as to the source of infestation, but seven cases gave a history of contact with cases among their friends, socially or at school, and in three cases relations or similar contacts who were probably infested were reported.

Special baths are now only given in exceptional cases where treatment at home is impossible or likely to be unreliable. During 1969, 15 males were treated at the Disinfecting Station at Feeder Road, and 6 children were treated at the Central Health Clinic, Tower Hill.

Malaria

Three cases of malaria were notified during 1969, although there were in fact four cases, one case being discovered as a result of perusal of death registrations.

Of the four cases two died, both from malignant tertian malaria (plasmodium falciparum). One was an Asian ship's cook, who became unwell shortly before arriving in Avonmouth from West Africa. He was treated on board ship as a case of pneumonia for three days, but his condition deteriorated and on the fourth day he was transferred to hospital, where he died shortly afterwards. The diagnosis of malaria was made post mortem. The second death occurred in a ship's master who was found unconscious on board shortly before his vessel docked at Avonmouth. This ship also had just come from West Africa. He was admitted to hospital with a tentative diagnosis of cerebral malaria, but failed to recover.

The two non-fatal cases, which were caused by plasmodium vivax, both occurred in 19-year-old men who had recently returned from abroad.

These incidents reinforce the oft-given advice that awareness of the possibility of exotic diseases occurring in Britain must be maintained, and due note taken of whether an ill person has recently been abroad. They also remind us that all travellers must be made fully aware of the need to take anti-malarial drugs as prophylactics during their journeys in certain parts of the world.

VACCINATIONS AND IMMUNISATIONS 1969

As in previous years every effort was made to keep the subject of vaccinations and immunisations prominent in the minds of nursing and medical staff. A very attractive poster was produced by a health visitor as the result of a competition. Its theme was immunisation and it was aimed at the parents of infants and school children.

No changes were made to the recommended immunisation schedule during 1969.

In June, the Joint Committee on Vaccination and Immunisation recommended that "Well-covax" measles vaccine should no longer be used in Great Britain. Because other vaccines were in short supply vaccination against measles had to be restricted to susceptible children between their fourth and seventh birthdays and to susceptible children attending day nurseries or nursery schools or living in residential establishments and aged between 1 and 7. Fortunately, we found that we had adequate stocks of an alternative vaccine so restrictions were lifted in August.

Since this adverse publicity towards measles vaccine, considerable reluctance has been shown by parents to have their children protected and as a result our campaign suffered a serious setback.

During 1969 an effort was made to get local authority staff adequately protected against those diseases they were likely to encounter in their daily work. A good response was obtained from most departments but continued vigilance and persuasion is necessary to achieve our desired objective.

During the early summer several cases of suspected poliomyelitis were reported in Spain. Intending holiday makers were advised to receive a dose of oral polio vaccine before leaving this country. This largely accounts for the increase (compared with 1968) in booster doses administered to the 5-15 age group.

The immunisation rate for children born in 1968 was 78% for diphtheria, whooping cough and tetanus and 74% for polio.

B.C.G. Vaccination

The policy of offering vaccination against tuberculosis to children in secondary schools continued during 1969. There was a very satisfactory acceptance rate of 82%.

In November 1969 it was decided to vaccinate those children who were Heaf test positive grade 1. In this group vaccination should be omitted only if there is a previous history of B.C.G. vaccination within the previous ten years and if this can be confirmed by the presence of a scar.

Weak sensitivity to human tuberculin in unvaccinated children is now often due, not to previous infection with mycobacterium tuberculosis, but to infection with other antigenically related mycobacteria.

B.C.G. January 1st—December 31st, 1969

School Children				
Number skin tested ...	4,810			
Number defaulting reading			310	
Number tested and read	4,500			
Number found negative	3,751			
Number negative vaccinated			3,747	
Number Positive 1 vaccinated			61	
Number negative refused vaccination			4	
Number Heaf grade Positive 1.	523			
" 2.	108			
" 3.	57			
" 4.	Nil		688*	
			<hr/>	
			4,810	
Acceptance Rates				
L.E.A. schools ...	...	81%		* 376 positives as the
				result of previous
Independent and private schools		83%		B.C.G. Natural con-
				version rate 6.5%.
Overall ..	...	82%		

Foreign Travel Clinic

Weekly clinics continued to be held throughout the year at Central Health Clinic. The main function of the clinic is to undertake yellow fever inoculations. When patients attending for this require other inoculations, these may be given as well. Other people requiring inoculations who for any reason are unable to obtain them through their family doctor may attend irrespective of whether they require yellow fever inoculations.

Attendance is normally by appointment but a considerable number of people ask for special appointments outside the normal clinic sessions.

In order to defray expenses, it became necessary to increase the charge for yellow fever inoculation and for the provision of international certificates in relation to other procedures.

Several school sessions were arranged for parties travelling abroad.

During 1969, 2,782 people attended the weekly clinics and a further 986 attended specially arranged sessions.

430 children attended school sessions.

The occurrence of several cases of enteric fever amongst returning holiday makers, which were associated with several separate outbreaks in holiday resorts abroad, resulted in a great deal of press publicity during the summer months. As a result, a considerable demand for last minute administration of T.A.B. vaccine occurred, and several special sessions were arranged at Central Health Clinic at which queues of intending travellers attended, often only a matter of days before they were to travel. The considerable rise in the number of T.A.B. inoculations given—from 216 in 1968 to 824 in 1969—is mainly the result of this “last minute” demand. Since only completed courses are recorded, the small number who received only a single dose before going abroad are not included in the above totals.

Inoculations given (completed courses only)

Yellow Fever	...	...	1,135
T.A.B.T.	...	...	824
Smallpox	...	...	926
Cholera	...	...	377
Typhus	...	...	12

Reason for going abroad

Holiday	...	...	53%
Business	...	...	27%
Emigrants	...	...	9%
Other	...	...	11%

75% travelled by air.

In addition, staff authenticated the family doctor's signature on 730 cholera and 5,884 smallpox certificates.

METEOROLOGICAL RECORDS 1969

	Air Temperature (°C)					No. of ground frosts	Rainfall (")		Sunshine (Hours) Percent of Average	Soil Temperature at 0900 G.M.T. °C						
	Means A	Means B	Means of A & B	Diff. from normal	Max.		Min.	Total		Percent of Average	Daily Mean	4"	8"	24"		
January	...	8.9	4.0	6.4	+1.8	13	-3	16	3.11	95	0.70	1.07	68	4.8	4.9	5.8
February	...	4.7	-0.6	2.0	-2.8	12	-6	23	1.70	69	0.31	2.20	91	1.4	2.1	4.4
March	...	7.9	1.4	4.7	-1.9	13	-3	18	2.59	116	0.98	2.30	60	3.4	3.9	5.1
April	13.0	3.7	8.4	-0.3	21	-1	14	1.57	70	0.44	6.87	130	7.7	7.5	8.1
May	15.5	7.6	11.6	-0.1	21	2	2	3.28	129	0.77	4.63	74	11.9	11.4	11.8
June	19.4	9.6	14.5	-0.2	26	4	0	1.47	67	0.39	9.18	131	16.1	15.5	15.4
July	21.5	12.6	17.1	+0.7	29	7	0	4.28	137	3.50	7.13	116	19.0	18.8	17.6
August	...	20.3	13.1	16.7	+0.6	27	6	0	2.76	78	1.74	5.44	93	16.8	16.8	17.8
September	...	17.8	10.4	14.1	+0.2	21	1	1	1.83	57	0.56	3.19	70	14.5	14.8	16.1
October	...	16.8	9.6	13.2	+2.6	24	2	0	0.47	13	0.21	3.53	109	12.2	12.7	14.3
November	...	9.8	3.9	6.6	-0.5	16	-7	17	4.55	127	0.62	3.03	159	5.8	6.6	9.8
December	...	6.9	1.3	4.2	-1.0	12	-3	20	2.67	73	0.61	1.26	84	3.2	4.4	6.1
Totals of Means		13.5	6.4	10.0	-0.1	—	—	111	30.28	84	—	4.15	100	9.7	10.0	11.0

Figures supplied by courtesy of the University of Bristol's Department of Agriculture and Horticulture Research Station, Long Ashton.

VENEREAL DISEASES

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In 1969 the total number of new patients seen at the Bristol Venereal Disease Clinics rose by 27% over the previous year.

TABLE 1
NEW CASES—ALL CONDITIONS—BRISTOL VENEREAL DISEASES CLINICS
1963—1969

<i>Year</i>	<i>All Cases</i>	<i>Bristol Residents</i>
1963	2,968	2,448
1965	4,404	3,635
1967	4,154	3,463
1968	4,425	3,956
1969	5,624	4,830

SYPHILIS

The incidence of early, infectious syphilis remains very low in the city. 14 cases of primary and secondary syphilis were seen in 1969, 12 of them in Bristol residents. In addition, 7 cases of late syphilis and 3 cases of congenital syphilis, all over 15 years of age, were treated during the year.

TABLE 2
NUMBER OF CASES OF SYPHILIS SEEN AT BRISTOL CLINICS 1963—1969

<i>Year</i>	<i>Early Syphilis</i>	<i>All Cases Late Syphilis</i>	<i>Congenital Syphilis</i>	<i>Total</i>	<i>Early Syphilis</i>	<i>Bristol Residents Late Syphilis</i>	<i>Congenital Syphilis</i>	<i>Total</i>
1963	31	33	—	64	14	28	—	42
1965	16	8	—	24	—	8	—	8
1967	28	9	3	40	4	17	3	24
1968	19	21	4	44	13	5	3	21
1969	14	18	3	35*	12	7	1	20

* Does not include Avonmouth.

GONORRHOEA

There was a very considerable increase in the number of cases of gonorrhoea seen at the Bristol clinics in 1969.

TABLE 3
INCIDENCE OF GONORRHOEA—BRISTOL CLINICS 1966-69

<i>Year</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
1966	538	255	793
1967	665	388	1,053
1968	673	355	1,028
1969	872	613	1,485

These figures show a 29·5% rise in male cases and an alarming increase of 70% in female cases in 1969 as compared with the previous year. These figures include a proportion of non-Bristol residents and a more accurate picture of the situation in the city is obtained by comparing the incidence of gonorrhoea in 1969 with that of 1968 for Bristol residents only.

TABLE 4

INCIDENCE OF GONORRHOEA—BRISTOL RESIDENTS 1968 and 1969

<i>Year</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
1968	542	336	878
1969	698	549	1,247

Amongst Bristol residents in 1969 as compared with 1968 there was a 29% increase in male cases and a 68% increase in female cases.

A disturbing feature in the rising incidence of recent years has been the disproportionate increase in the number of female cases. Some years ago there were four cases of gonorrhoea in males for every female patient. In 1969 the sex ratio at the main Bristol clinic was 1.4 male cases of gonorrhoea to each female case.

There was no appreciable change in the proportion of patients, under the age of 20 years, requiring treatment for this condition.

TABLE 5

GONORRHOEA — MAUDLIN STREET CLINIC, BRISTOL
PERCENTAGE OF PATIENTS UNDER 20 YEARS 1963—1969

<i>Year</i>	<i>Male %</i>	<i>Female %</i>
1963	7.7	30.0
1965	9.3	35.0
1967	10.5	39.4
1968	8.3	33.0
1969	11.0	32.0

A more detailed analysis of these young patients shows a very disturbing increase in the number of young girls requiring treatment.

TABLE 6

GONORRHOEA — MAUDLIN STREET CLINIC, BRISTOL
AGE ANALYSIS 1968/69

AGE GROUPS UNDER 20 YEARS

<i>Year</i>	<i>Under 16</i>		<i>16 and 17 years</i>		<i>18 and 19 years</i>		<i>Total under 20 years</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
1968	—	3	8	39	42	69	50	111
1969	1	16	14	74	77	99	92	189

MATERNAL AND CHILD HEALTH SERVICE

Sarah Walker

(Senior Medical Officer, Maternal and Child Health Service)

In 1969 the birth rate for Bristol residents showed a further fall; there were 6,462 registered live babies compared with 6,731 in 1968, giving a birth rate of 15·6 compared with 16·2 in 1968. This is well below the national rate of 16·3 for England and Wales in 1969. While there were fewer illegitimate live births, 686 compared with 699 in 1968, there was, unfortunately, a rise to 10·6%, from 10·4% in 1968.

The infant mortality rate of 16·2 is the lowest ever recorded in the City, but the rate for illegitimate infants of 24·8 was high compared with the legitimate rate of 15·2, a gap which accentuates the greater hazards to which the illegitimate baby is exposed. The stillbirth rate of 12·2 provides the same low record as in 1964, the perinatal rate of 20·5 is the lowest ever recorded in the City. There was one maternal death during the year (rate 0·15)—an expectant mother aged 42 having her fifth child who died at the 7th month of pregnancy undelivered, as the result of pulmonary embolism.

The majority of Bristol babies were born in hospital, 90·2%, with only 9·8% born at home. Reference was made in last year's report to the Short Stay General Practitioner Unit at Southmead Hospital, a small pilot trial with only two beds allocated for the purpose. Unfortunately this unit was closed in May 1969 for a temporary period due to an extensive electrical re-wiring programme in the maternity units. The Bristol Maternity Hospital generously offered a similar facility and so after an interval of about 6 months we have been able to continue on a small scale, the scheme which has proved very popular with the mothers and their husbands, as well as with the general practitioners and domiciliary midwives. In due time, it is hoped that a permanent unit with more beds will be provided for this purpose.

Planned early discharge from the maternity hospitals continues to meet the wishes of many mothers who, while desiring or needing delivery in hospital, prefer to return home with the baby for their subsequent care by the general practitioner and domiciliary midwife. It is interesting to note the high proportion of husbands who elect to take their holiday at this time in order to look after their wife and baby. The following table gives the number of early discharges which took place during the year.

<i>1st-3rd day</i>	<i>4th-5th day</i>	<i>6th-8th day</i>
990	759	337
(988 in 1968)	(742 in 1968)	(397 in 1968)

Family planning advice is provided as part of the M. & C.H. Service in nine of the Department's main clinics, and by the Family Planning Association who at the end of 1969 were holding sessions at nine clinics and health centres in the City. The Health Department, who provide a free service, is concerned mainly with those needing birth control advice for medical or social reasons. During 1969 the following numbers were dealt with by the Department:—

<i>New clients</i>	<i>Old clients</i>	<i>Total</i>
928	3,112	4,040

The intrauterine contraceptive device clinic, held at Central Clinic, at two evening sessions each week, continues to serve a very useful purpose.

Cervical smear tests for the early detection of cancer of the cervix are carried out at all the main health clinics and centres. A total of 5,492 women had smears taken during the year, compared with 5,825 in 1968. In addition 528 staff members attended for tests. Cervical smear tests were also carried out for six local firms, involving a total of 344 women employees. Most of these were conducted on the firm's premises, thus enabling women to have the test taken on the spot, without having to make a special visit to their doctor or to a clinic. The opportunity is also taken at the same time to examine the breasts, and to instruct women in routine self examination for the purpose of early detection of breast cancer.

Of the total women who had cervical smears carried out by the Department, one woman was found to have carcinoma of the cervix and was treated by immediate hysterectomy, and seventeen had a cone biopsy for carcinoma in-situ.

One of the special events in 1969 was the opening in August, with the official opening by Princess Anne in October, of the St. Paul's Day Nursery. This provides accommodation for 45

children and is the first purpose-built day nursery in the city, bringing the total number of day nurseries up to eight. There is still a need for further provision particularly to serve Hartcliffe and Withywood.

The Nurseries and Child Minders' Act, 1948, as amended by the Health Services and Public Health Act, 1968, has resulted in considerable work for the section, not only in the field of child minding but with the ever increasing number of playgroups. The latter are making a valuable contribution to the educational opportunities for young children and particular tribute is due to the very active Bristol branch of the National Playgroups Association who are doing a great deal to inspire interest and to foster high standards.

A routine blood test for the detection of phenylketonuria is now being carried out for all babies. Those who remain in hospital up to and including the 7th day of life have the test taken in hospital; those discharged home before the 7th day have the test carried out by the domiciliary midwives.

The following reports relate to some of the services provided by the Maternal and Child Health Section.

DOMICILIARY MIDWIFERY SERVICE

Miss W. A. Outram, Non-medical Supervisor of Midwives

During the twelve months of 1969, 646 babies were born to mothers who remained in their own homes for confinement. It can be said that these mothers wished to stay at home and with their family at the time of confinement, as well as being without any obstetrical, medical or social complications necessitating a hospital admission for delivery. This figure of 646 home confinements is slightly less than 10% of all births of babies born to Bristol citizens, 90% taking place in maternity hospitals. This national trend for institutional delivery is made possible by the increase in allocation, and greater use of maternity beds. Patients are discharged from hospital within two or three days following confinement, for nursing care to be continued at home by the midwife. Twenty-four domiciliary midwives gave such care to 2,086 Bristol mothers and babies for the first twenty-eight days after delivery, which is 35% of all Bristol patients delivered in the maternity hospitals. Very few mothers wish to remain in hospital, but are anxious to return to their own homes and family as early as possible. Arrangements are made during pregnancy by the general practitioner, midwife and clinic superintendent for early post-natal care at home, the hospitals also being informed. Our midwives are fully occupied with the nursing care of such a large number of mothers and babies sent home within the first few days following confinement, in addition to caring for those mothers with their babies born at home. A considerable proportion of the work of the midwives is that of giving ante-natal care, combined with the general practitioner, to the majority of expectant mothers in the City, either in the clinics or by making home visits.

In October a labour ward suite in the Bristol Maternity Hospital was given over to the general practitioners and midwives working within a generous geographical area, to use as a Short Stay Delivery Unit. The general practitioner and midwife give combined ante-natal care and arrange for delivery in the Short Stay Unit. The patients accepted are those who would be suitable for a home delivery, i.e. free of any obstetrical, medical or social complications. The midwife accompanies the patient to the unit when labour commences and gives care throughout; then following the birth of the baby takes the mother and baby home where care is continued. The general practitioner is also in attendance and in this way the patient has her own doctor and midwife, feels the security of hospital facilities and can return to her family without any delayed interval of separation. It is easy to imagine how popular this mode of care is with the mothers, as well as with midwives and obstetrically interested general practitioners. The hospital staff are always most helpful and welcoming, which is greatly appreciated.

Pupil midwives from the Bristol Maternity Hospital and Southmead Hospital and those taking the entire six months training with the City's domiciliary service gain experience with the midwives, and are made aware of the other services taking place in the community. Greater emphasis in the training of the pupils, is placed on giving knowledge and the opportunity of experiencing, the overall care of the community.

Changes are anticipated in the Health Service which will necessarily involve the Domiciliary Midwifery Service. Gradual changes have evolved over the years of the sixties, but an expectant mother must be given skilled care and advice, for her well being and that of her unborn child. Care at the time of confinement must be of the best, and continue to be so during the early post-natal period, for the benefit of the mother and of the newborn and of the family. This is the aim of the midwifery service.

SUB-FERTILITY CLINIC

Dr. Norma Boxall, Medical Officer of the Women's Clinic

	1969	1968
New cases	310	282
Old patients attending	1,276	1,303
	<hr/>	<hr/>
Total	1,586	1,585
	<hr/>	<hr/>
Pregnancies reported	86	105
Marital problems	35	34

The number of new patients attending this clinic has increased this year; the numbers of marital problems has remained about the same although the Family Planning Association has set up special sessions, showing that there is still need for advice at this clinic as well.

The staffing of the clinic has remained the same during this past year, but unfortunately Dr. Foss's illness held up the work on the male side.

Dr. Christopher Morris has now finished his report into the best and most economic pathological methods of detecting pelvic tuberculosis, using our patients for his material. When the work is published, it may be possible to adopt his suggestions at this clinic. No new cases of tuberculosis were detected this year.

Cervical smears have been done on all patients for the past four years, and this year, for the first time, two positive results were obtained: the women were referred to the General Hospital, one case being sufficiently advanced to need a total hysterectomy.

As obesity, irregular periods and subfertility are connected, a record has been kept of all overweight patients; these amounted to 54, nearly 17% of women attending. The majority have agreed to see the dietician for advice and help in weight reduction.

Dr. George Foss, Medical Officer of the Men's Clinic

The year ending February 1970 was unfortunately disturbed by illness in November 1969, bringing this clinic to a sudden halt which lasted four months and only 40 sessions were completed. However, during this time 100 new cases were examined and altogether there were 373 attendances.

The new cases are classified as follows:

Oligozoospermia and/or poor motility	60
azoospermia	4
normal spermatogenesis	5
impotence and sexual difficulties	26
failed to complete investigation or keep appointment	5

It was reported last year that four cases of Klinefelters syndrome had been found after investigations to have live sperm in some ejaculates and the details of these cases, and their investigation with chromosome analysis by Dr. Frank Lewis and serial hormone studies before and after clomiphene by Dr. John Loraine in Edinburgh, were reported at the annual conference of the Society of Reproduction and Fertility which was held in June 1969 in Bristol. Two papers on these cases await publication.

Treatment by clomiphene is known to have been followed in only two cases by pregnancy in the patient's wife; whether due to this therapy or not is impossible to say. This treatment is now being superseded by the use of a new oral androgen which is said not to inhibit gonadotrophin activity and probably acts on the epididymis. Claims have been made of its efficiency in Germany and a controlled trial is being conducted on suitable cases of oligozoospermia and poor motility.

The investigation of cases of impotence by estimation of blood testosterone has shown that even in youngish males, levels can be near the female figure and often high dosage treatment with long acting esters of Testosterone have had a satisfactory effect.

The Pre-school Child with Congenital and Acquired Abnormalities

Dr. Mary Gibson, Deputy Principal Medical Officer, Maternal and Child Health Service

The completion of the seventh year of notification of congenital malformations easily detectable at birth, by local authorities to the Department of Health, seems an appropriate time to look at the merits and demerits of the scheme in this region.

In the following table five conditions which should be very readily visible at birth have been selected for comparison :—

<i>No. notified at birth (live and still births) for period 1.1.69— 31.12.69</i>	<i>No. recorded on Bristol Abnormality Register by 28.2.70 from all sources including birth notifi- cation for same period</i>
Talipes (all forms) 20	38
Mongol 7	15
Hare Lip 4	6
Overt Spina Bifida 22	25
Anencephaly 11	12

In some cases the abnormality was entered on the birth notification as a query and in these the entry was counted in this table and notified to the Registrar General, only if confirmed by the paediatric registrar familiar with the case, or by the pathology laboratory if the baby had a post mortem examination.

That a third of the babies born with a hare lip for example, are apparently not noticed within 36 hours of birth is not credible although there might be some element of doubt about a Mongol. The discrepancy between these two groups of figures has been apparent to much the same degree each year since the inauguration of the scheme.

Th effect of the rubella epidemic of 1968 on the incidence of nerve deafness, congenital cataract and congenital heart disease in children born during 1969 is referred to in the preface to this annual report.

The close links with mental health, school health and hospital services has continued to result in earlier and more appropriate help being given to the young child with congenital or acquired abnormalities and to their families.

One group which still is difficult to help adequately is the small group of very severely mentally subnormal babies and young children, whose care in a modern, non sound proof house may place an intolerable burden on the family and in particular the mother. There is still no day care available for the child under two to give the mother relief, and there is still up to two years' wait before permanent residential care can be provided in a hospital for the severely mentally subnormal.

SPECIAL FAMILIES

Dr. C. D. Hopkins, Senior Departmental Medical Officer

The number of families on the Special Register shows a slight increase from 1,142 in 1968 to 1,162 in 1969. The new cases ascertained and added to the register have, however, decreased from 245 in 1968 to 139 in 1969. These latter decreasing figures are the more correct reflection of prevailing conditions and one can almost deduce that the modern and more acceptable methods of family planning are becoming effective.

The Special Families Health Visitors find that the most common problem amongst the less able families is still poverty, and constant supervision is required to recognise potential crises in time, so as to be able to avoid them. Families on long-term social security are fairly stable, the weekly income being known; living standards, though poor, can be adapted accordingly. Crises arise particularly where father normally works, but is on low wages. If he should lose his job the immediate situation can become urgent: commitments such as weekly clubs, court orders, and hire purchase payments all have to be met, and those workers whose weekly income is around £12 per week have little opportunity to save for such an emergency. Many of these parents are illiterate or nearly illiterate and are too apathetic to act on their own initiative. They require a lot of supervision so that help may be given at the appropriate time, otherwise the family rapidly becomes destitute and this may lead to eventual break-up.

One way in which these inadequate and often desperately lonely mothers may receive assistance is by group teaching. This has been found to be most constructive in enabling the health visitors to know the mothers better and to understand their problems, and for mothers to meet others with similar difficulties has helped them too. It has also meant that for one afternoon a week they have been able to leave their grim homes and sit in the warmth and comfort of the local clinic. Here their children have been able to play together while the mothers receive elementary instruction in sewing, knitting and cooking with guided discussions on such basic principles as child care, health and budgeting.

WELFARE OF UNMARRIED MOTHERS

Mrs. W. Munday, Social Worker

During 1969 836 clients sought help from the section, 49 fewer than in 1968.

The number of pregnancies terminated amongst girls referred rose from 10 in 1968 to 22 in 1969, reflecting the wider publicity given to the subject. Many girls, however, seek help when it is too late for termination to be considered.

There were 48 fewer Court cases for affiliation orders completed during 1969; this is attributed mainly to the new and complicated system appertaining to free legal aid. Whereas in the past, cases were usually completed within two months, it now takes several months to reach a conclusion. Also it is often felt by some social workers that an unmarried mother should not be encouraged to take this action, but to rely on the putative father making voluntary payments.

During 1969 the number of babies adopted rose to 129 from 77 in 1968. In most cases the infants were fostered at 10 days from hospital, and very few of these girls kept their babies with them for six weeks.

In 1969 86 girls married the putative father before the birth and 12 after the birth. The comparable figures for 1968 were 77 and 15 respectively.

There was an increase in the number of girls under the age of 16 years seeking help: the figure rose from 21 in 1968 to 24 in 1969.

The number of girls admitted to St. John's Mother and Baby Home, with whom we have an agency arrangement, was small at the beginning of the year, but in the last few months of the year there was a steady increase in the requests for admission. We are indebted to the staff of the home for their co-operation and for their good care of the girls and the babies.

CLINIC ATTENDANCES

	New patients	Total attendances
a) Antenatal		
(i) Medical Officer sessions	241	1,911
(ii) G.P. sessions	4,300	33,259
(iii) Consultant sessions	2,263	7,116
(iv) Midwives' sessions	190	1,526
b) Postnatal (including birth control)		
Medical Officers and G.P. sessions	4,651	8,327
c) Child Health Clinics		
(i) Total number of infants under one year ..		9,873
Total attendances of infants under 1 year		46,534
(ii) Total number of children aged 1-5 years		13,637
Total attendances of children aged 1-5		
years		37,468
d) Parentcraft Classes		
Number of expectant mothers who attended		
classes		1,587
Total number of attendances		7,185
e) Special Diagnostic Clinic		
(i) New patients	356	
(ii) Attendances	611	
Health Visiting		
Home visits: (i) Primary (to new babies)		6,391
(ii) Infants under 1 year (excluding (i) above)		20,283
(iii) Children 1-5 years		66,634
Sessions at clinics	5,437	
Time spent at nursery schools and classes	912 hours	

DENTAL HEALTH OF MOTHERS AND PRE-SCHOOL CHILDREN

Mr. J. McCaig, Chief Dental Officer, reports:—

This service provided by the School Dental Service occupies approximately the equivalent time of one full-time dental officer. All cases referred by medical officers, general practitioners and mothers seeking treatment for themselves or their children were inspected and comprehensive treatment was available for those who required it.

Treatment followed the trend of previous years. It is an inescapable conclusion from studies carried out in institutions and isolated communities, that limiting the amount of sugar in the diet is one of the most effective methods of preventing increase in dental decay. Control of the diet to the extent needed in a free and permissive society appears to be restricted to the dedicated few. The majority of people are unable or unwilling to control their sugar intake and one must look for other preventive measures of reducing caries. The greatest advance to date has been the discovery that people born and bred in areas where the drinking water contains approximately one part per million of fluoride, have a greatly reduced incidence of dental caries, when compared with similar communities consuming drinking waters which are free or virtually free of fluoride.

The Committee on Research into Fluoridation, in a report now published, confirms that fluoridation is highly effective and completely safe. The Committee's report after eleven years' experience of fluoridation, describes the results of studies begun in 1955-56 in certain areas of the United Kingdom, of the regulated addition of minute quantities of fluoride to water supplies and shows that the prevalence of dental decay in children's teeth can be greatly reduced. In the fluoridated study areas the amount of decay in the temporary teeth of children, aged three to seven years inclusive, fell by as much as a half, the number of children free from decay more than doubled and the number of children with ten or more decayed teeth fell by four-fifths. Beneficial changes took place in other age groups and these changes are in marked contrast to those that took place in the unfluoridated control areas, where the amount of decay fell by only one-fifth in the three to seven age group and by only one twentieth in the age group eight to ten.

Kilmarnock was one of the areas where studies began in 1955-56 and by a decision of the Burgh Council, ceased fluoridation in 1962. However, the studies of the dental health of children in that town and its control town of Ayr, were continued and the findings, appended to the Research Committee's report, are of particular interest. These findings show how the amount of dental decay in young children in Kilmarnock who have had little or no fluoride, is climbing back to its pre-fluoridation level. The table at the end of this section shows the work carried out by the school dental officers for the Maternal and Child Health Service.

DEPARTMENT OF HEALTH AND SOCIAL SECURITY

NATIONAL HEALTH SERVICE ACT 1946

Local Authority Dental Services for Expectant and Nursing Mothers and children under 5 years as at December 1969

Part A—Attendances and Treatment

							<i>Children</i>	<i>Expectant and</i>
Number of visits for treatment during year							<i>0—4 (incl.)</i>	<i>Nursing Mothers</i>
First visit	...	...	...	...	...	...	937	444
Subsequent visits	...	...	...	...	...	...	801	723
Total visits	...	...	...	...	...	...	1,738	1,167
Number of additional courses of treatment other than the first course commenced during year							61	9
Treatment provided during the year—number of fillings							1,262	772
Teeth filled	...	...	...	...	...	...	1,172	726
Teeth Extracted	...	...	...	...	...	...	1,060	352
General Anaesthetics given	...	...	...	...	...	...	382	44
Emergency visits by patients	...	...	...	...	...	...	86	17
Patients X-Rayed	...	...	...	...	...	...	3	21
Patients treated by scaling and/or removal of stains from the teeth (Prophylaxis)							38	152
Teeth otherwise conserved	...	...	...	...	...	...	279	
Teeth root filled	...	...	...	...	...	...		6
Inlays	...	...	...	...	...	...		—
Crowns	...	...	...	...	...	...		4
Number of courses of treatment completed during the year							567	202

	<i>Children</i> <i>0—4 (incl.)</i>		<i>Expectant and</i> <i>Nursing Mothers</i>	
Part B—Prosthetics				
Patients supplied with F.U. or F.L. (first time) ...				14
Patients supplied with other dentures				18
Number of dentures supplied				36
Part C—Anaesthetics				
General anaesthetics administered by dental officers				3
Part D—Inspections				
Number of patients given first inspections during year	A.	1,388	D.	411
Number of patients in A and D above who required treatment	B.	824	E.	362
Number of patients in B and E above who were offered treatment	C.	853	F.	360
Part E—Sessions				
Number of dental officer sessions (i.e. equivalent complete half days) devoted to maternity and child welfare patients :	For treatment		G.	464
	For health education ...		H.	30

NURSING SERVICES REPORT

Margaretta Marks Jones
(Chief Nursing Officer)

This has been another year of steady progress in the domiciliary nursing service.

Health Visiting Service

The pattern of work of the health visitor continued to be very much the same as in 1968 with the exception of minor changes. Following the pilot study of the use of a blood test for the detection of phenylketonuria, the procedure was extended throughout the city. All babies were tested between 10-15 days by either the health visitor or midwife who was visiting at that period.

With the disbandment of the special health visitor service for tuberculous patients the district health visitors took over the necessary follow-up visiting. The continuing low notification rate and early treatment that leads to quick return to employment, means that the additional work is small for any one health visitor.

The major survey with which health visitors were concerned during the year was the National Child Development Study (1958—Cohort). Before the national study was launched a group of health visitors carried out a pilot study to test the questionnaire to be used for the parental interview.

While the health visitor continues to be a health educator principally through her relationship with mothers in their own homes, there is an increasing number of opportunities to participate in group teaching. A number of health visitors formed part of the team for the "Save a Life" demonstration which was organised at the 1969 Annual Flower Show. On this occasion their audience was widely varied in every way.

Recruitment

The main source of recruitment is from our own training centre. For the course 1968/1969 thirteen students were sponsored by the city, all of whom were successful in the examination.

Six health visitors joined the staff from other local authorities. Fourteen left the authority for the following reasons:— domestic reasons—10, overseas—3, other work—1.

Refresher Course and In-Service Training

Six health visitors attended courses arranged for Fieldwork Instructors. One divisional nursing officer and a sister-in-charge health centre attended a Management and Teaching Course arranged by the Department of Social Studies at Filton Technical College. Two health visitors attended a refresher course arranged by the Royal College of Nursing. A study day on Cervical Cytology was arranged for members of the health visiting staff. This proved to be a most valuable day and was much appreciated by the staff. Many members of the staff were given opportunities to attend other study days and conferences.

Liaison with Hospital and Family Doctors

Health visitors are linked with hospital in many ways. Continued weekly visits are made to the Bristol Maternity Hospital, Bristol Royal Hospital for Sick Children, and to the paediatric ward of Southmead Hospital. Four health visitors who specialise in the care of the sick and aged have close liaison with the staff of the geriatric hospitals and have personal contact with the nursing and medical staff and medical social workers. Three district health visitors are allocated part time to the follow-up of premature babies in their own homes and have close contact with the prematurity units of various hospitals. There is close co-ordination and co-operation between health visitors and general medical practitioners. This is more satisfactory in the health centres where all members of the nursing staff have close contact with the doctors and in those local authority clinics where family doctors participate in the maternal and child health clinics.

The highlight of the year was the opening of Southmead Health Centre—the fourth in the city. The health visitors for the district, including those with special responsibilities, are based at the health centre. Midwives and district nurses for the area are also contacted here.

No attempts have yet been made to second or attach health visitors to family doctors. A study is being carried out at the present time of referrals of patients to and from health visitors and general practitioners, to obtain base line data before embarking on an attachment scheme.

Following this an experimental full attachment scheme of health visitors to groups of general practitioners working at a health centre will be carried out.

Specialisation—Sick and Aged

The special health visitors dealing with the sick and aged visited 1,748 new cases compared with 1,750 in 1968. However, other cases visited during the year totalled 2,469, making a total of 4,217 cases seen. The corresponding figure for 1968 was 4,468.

The total visits paid during the year were equally shared by the special health visitors and their assistants. Together they paid 14,258 visits compared with 13,816 in the previous year. In addition to these visits by the special staff, the district health visitors also paid 2,376 visits to the aged.

The following is a summary of cases visited for the first time in the current year by the special health visitors and their welfare assistants.

	<i>Males</i>	<i>Females</i>
1. 65 years of age and over	1,124	2,767
2. Under 65 years of age	113	213
3. Number in '1' visited at request of G.P. or hospital		1,451
4. Mentally disordered persons		29
5. Number in '4' visited at request of G.P. or hospital		20
6. Persons discharged from hospital other than mental hospitals		491
7. Number in '6' visited at request of G.P. or hospital		475
Total number of household visits during the year	12,950	

Night Watcher Service

There were 942 nights worked and the service was given to 99 patients.

Chest Department

	<i>BCG visits</i>	<i>Primary visits</i>	<i>Other visits</i>	<i>Total</i>	<i>Clinic sessions</i>
1968	611	104	1,641	2,356	1,050
1969	442	118	1,697	2,252	425

It had been planned that during 1969 nursing personnel for clinic duties would be appointed by Southmead Hospital Management Committee to replace members of the tuberculosis visiting team as they retired. The plan was completed by August and since then the remaining member of the team has been working as liaison tuberculosis health visitor. She is responsible for the initial visiting of the newly notified tuberculosis patients and the organisation of contact tracing and examinations. Subsequent visiting to these patients is now done by district health visitors.

The liaison tuberculosis health visitor continues to cover part of the programme of BCG vaccination in schools and has been responsible for the training of the school staff nurses in comprehensive schools, so that they are now able to continue with this aspect of the school health service.

Premature Babies

The number of premature babies in the care of health visitors in 1969 was much the same as in 1968. During the year 513 babies were visited of whom 415 were in the Bristol area.

Specialist Health Visitor for Special Families—See report on Special Families.

Ancillary Nursing Services

Although much has been done in the past in anticipation of the circular—Use of Ancillary Help in the Local Authority Services, further consideration was given to the matter early in the year. As a result the clinic nurse establishment now includes not only S.R.N.s but also S.E.N.s. More S.R.N.s are undertaking surveys and assisting with medical inspections in senior schools. Two S.R.N.s are employed on sessional basis to carry out home visiting in connection with infectious diseases control. Clerical help is given to health visitors as far as possible and authorisations for car allowances have increased.

No difficulty is encountered in the recruitment of clinic nurses, clinic helpers or of clinic assistants. These members of staff give valuable service and assist to achieve the most economical and efficient use of available staff.

Visitors to the Department

Students and pupils from the Nurse Training Schools continue to spend a day in the domiciliary field. A total of 315 student nurses and 33 pupil nurses accompanied health visitors and district nurses during the year. In addition the following professional students were helped:— 10 Diploma in Public Health postgraduate students, 76 Medical undergraduates, 15 Social Studies students, 60 Midwives refresher course, 4 Post graduate (Univ.) Nursing students, 16 student District Nurses.

Home Nursing Service

During the year attachment to general practitioners was extended to cover more areas in the city. Priority was given to the larger practices and to those in which a nurse could be given a base at the practice premises. The nurses call at the surgery each working day to consult about the bedside nursing of patients in their own homes and carry out a certain amount of observation and follow-up of sick people. In addition, most of them attend surgery sessions in the doctors' premises once or twice a week.

The tasks that they may do for the general practitioners were carefully discussed at the outset and include giving prophylactic injections under supervision, haemoglobin, blood pressure readings, E.C.G. tracings if the practice possesses an E.C.G. machine, certain screening tests and ear syringing.

At the present time 32 home nurses are attached in this way to 60 doctors.

These schemes of attachment have meant a great deal of reorganisation. Deployment of staff has needed careful thought and planning.

Consideration was given early in the year to the inclusion of nursing assistants in the establishment so that each member of staff would be used to her full potential. Job satisfaction has increased and patients have benefited. The nursing assistants' duties include patient bathing, assisting with dressing and undressing, and care which a relative or neighbour would normally undertake if available.

Careful selection of personnel and adequate in-service instruction were necessary for the successful integration of this new grade.

Training

National Certificate District Nursing

Staff students—4

Other L.A. „ —4

Course of Instruction for S.E.Ns. in District Nursing

Staff students—7

Other L.A. „ —1

A new scheme of integrated nurse training was commenced during the year for pupils at Manor Park Hospital. Eight pupils were seconded for 12 weeks during their second year of training and attached to the district nursing sisters for practical work. The theoretical content of the course was given on a weekly study day at the Training Centre. Close supervision by D.N.Os. and careful practical instruction from the field staff were necessary for the success of this new venture. During this period the pupils gained a wider outlook and knowledge of the community services. All were successful in their examinations.

HOME HELP SERVICE

M. R. Epplestone, S.R.N., S.C.M., H.V.,
(County Borough Organiser)

The accent this year has been on the home help herself and the role she plays in the present community. For several years now in-service and refresher courses have been held separately and proved to be of enormous value. In January 1969 these two courses were combined. It was felt that even more benefit would be given if the senior home help and the new entrant were paired off at the beginning of the school, rather than different experienced home helps taking new entrants, as was the case before. In this way more confidence is given to the trainee and a greater continuity of work.

The course is still of 20 hours' duration; ten spent in talks, discussions, films and demonstrations and ten in practical work. The trainee home help is given the opportunity of seeing various types of homes into which she may be asked to go and also the way that the experienced help handles her difficult patients.

At the end of the week the trainee is asked if she really wishes to do this work. Is it what she expected it to be? If not, she is asked to finish before the new programmes are made out.

During 1969, eleven combined schools were held, totalling 217 home helps. Of these, 100 were new entrants and only five withdrew at the end of or during the course. It is hoped that this method will cut down the wastage of home helps during the first year. The course is thoroughly enjoyed by home helps and tutors alike and it gives the organisers an excellent opportunity of assessing the new entrants as well as getting to know them. The courses can only be held from October to May owing to holidays.

The course has three aims:—

1. To provide a uniform standard throughout the service and an awareness of the changing social pattern and role of the home help.
2. To stimulate and encourage the home helps.
3. To give the home helps a sense of belonging to a service.

The work of the service

It would appear from the ever increasing numbers of people helped over the year that there are many more requests for help for the chronic sick, infirm and aged. The total number of cases helped at 31st December was 5,389, an increase of 230 over the previous year.

The number of requests for help received for 1969 was 2,377. Records show that the highest number—640—came from the medical social workers, 526 from general practitioners, 410 from patients or relatives, 239 miscellaneous, 220 from health visitors, 126 from district nurses, 124 from social security, 90 from welfare services and 2 from the Children's Department.

There still remains a nucleus of very difficult cases on whom the home help is unable to make any noticeable impression. These cases are of long duration, the persons often living in old derelict properties owned by themselves. The home help becomes depressed and asks to be moved after a short spell of duty. It is hoped that during 1970 special effort will be made to improve on these cases and a start towards this has been made by compiling a register. Specially selected home helps in the areas will be asked to attend these cases in a concentrated effort to improve the conditions.

The practice of selecting one or more home helps to cover blocks of flats, elderly people's dwellings or groups of patients living in close proximity to each other was started in 1961 and has steadily increased. Both patients and home helps welcome this arrangement as it cuts out travelling time. The home help appreciates the confidence that the organiser places in her and her ability to divide her time with best advantage to her patients.

Recruitment

Recruitment has been good throughout the year. There still remain, however, two areas where it is impossible to recruit any home helps and the chief difficulty here is lack of public transport.

Talks have been given to many groups of women's associations, health visitor students, pupil midwives, social science students and senior school girls.

This is the 21st year of the Home Help Service under the National Health Act. What a tremendous amount has been achieved—what a lot there is still to be done.

HEALTH EDUCATION

P. Mackintosh

(Health Education Officer)

Towards the end of 1968, after discussions with the Consultant Venereologist, it was decided that during 1969 the Department of Health and Social Services would conduct a sustained publicity campaign in support of the drive against venereal diseases. Patients attending the Bristol Treatment Centre frequently complained of the difficulties experienced in finding simple and factual information on V.D. and difficulty in locating the Treatment Centre. Leaflets, published by the Health Education Council and posters by the former Ministry of Health, have always been available, on request, from the Health Education Section, but the demand for information has always been on a small scale and limited to a few schools and youth clubs. Specially printed notices, giving the location and times of V.D. clinics in the South-Western area, have always been placed in all public toilets; however, these are damaged and defaced and replacements are frequent and costly.

As part of the publicity campaign, a local commercial artist was asked to design a notice which would look perhaps less 'clinical' than the earlier ones used; the result was an attractive coloured Fablon notice, which might even be described as 'tasteful' and which was certainly more acceptable to the much wider 'clientele' to which it was offered. Approaches were made to the managements of large stores, hotels, dance halls, bingo halls, clubs, hospitals and all such places which the public attend for shopping, entertainment or treatment.

There was a marked reticence by some managements when they were first approached. Some felt that the notices might 'offend' their customers; this was difficult to understand in an age when every other place of entertainment and every bookstall assault the eyes with illustrations of the nude human figure, and film and book titles titillate the imagination with the promise of the untold joys of promiscuity. However, many of the managers of places of entertainment which are frequently used by young people responded well and the Department is indebted to them for their co-operation.

Some of the large stores accepted, too, literature for their staff rooms and in some cases arrangements were made for talks to members of their staff.

Another new feature of this campaign was the success achieved in getting the British Transport Commission to agree to display especially designed posters (indicating the location and times of the V.D. clinics) on 250 of Bristol's buses for a period of one year. We have learned since that the display of these notices contravenes the Indecent Advertisements Act of 1889, but no action has been taken to invoke the Act and Bristol appears to be the only local authority in the country to have achieved this form of publicity.

Whilst it is important to tell the public of the times and locations of the treatment centres, perhaps even more important is the need to tell people, and especially young people, the *facts* about the venereal infections. Few attempts have been made in this country to assess public knowledge of many health problems; in the case of the venereal diseases there is still a great deal of ignorance of the facts, and before embarking on a programme of education, it was decided to carry out a survey among an 'educated' section of the community to test their knowledge of the facts about venereal diseases.

An Assistant Health Education Officer, studying for her Diploma in Health Education, spent two weeks in the City submitting a questionnaire to 296 students at two training colleges and a technical college. The questionnaire was of "True/False/Don't Know" variety and was based on one which had been used in the U.S.A. Among the students were a 'mature' group, i.e. teachers who had a minimum of five years' teaching experience; the male students in this group showed the best results, averaging only about 4½% 'don't know' or 'wrong' answers. The female mature students were the next most knowledgeable group whilst a group of young male students from one college, who named more sources of information from which they had acquired the 'facts' proved to be the least knowledgeable of the entire sample.

The survey did indicate a number of points where clearly there was a good deal of ignorance and misunderstanding. This kind of information proved to be useful to speakers from the Department when they visited schools and youth organisations to give talks on the subject of venereal diseases.

As a result of the V.D. Control Campaign talks were held with the Chief Inspector for Schools and other inspectors of schools to discuss a possible V.D. education programme. It was agreed

that a much wider programme should be planned and that further discussions with head teachers should re-examine the whole field of health education.

In each of the five education divisions of the City, the heads of primary schools met the Inspector for Domestic Subjects, the Senior School Medical Officer and the Deputy Health Education Officer. As a result of these meetings, a working party was set up consisting of two head teachers from each division, the Inspector for Domestic Subjects, the Senior School Medical Officer, the Deputy Health Education Officer and a representative of Marriage and Family Guidance. The first meeting to discuss the approach to health education in primary schools was due to take place in January 1970.

After a meeting of the heads of secondary schools with the Chief Inspector, some 36 teachers (some of them heads) were appointed as Health Education Convenors. Their first task, early in 1970, will be to complete a questionnaire, compiled by the Education and Social Services Departments and the Marriage Guidance Council. The subject of the questionnaire will be to assess what health education was being done in secondary schools and by whom; thereafter the Convenors would try to stimulate interest and action in developing health education further and to take part in organised in-service training courses, possibly one course per term.

Apart from the foregoing, officers of the Health Education Section organised a number of talks and series of talks for several secondary schools. Early in the year, fifth-year pupils at Withywood School, who were studying for C.S.E. Human Biology, received talks on the organisation of the health services and modern public health problems. In the last term, a 'health week' was arranged for third-year pupils. Each day, two hours were devoted to illustrated talks given by members of this Department. The subjects included: Health problems (drugs, V.D., smoking, food poisoning), mouth-to-mouth resuscitation, environmental health and personal relationships. A series of talks were given at Knowle Secondary School for third-year pupils and other requests from Queen Elizabeth's Hospital School, Badminton School, Clifton College, St. Bernadette's, Monk's Park, Ashton Park, Lockleaze and Brislington Schools were met.

In pursuance of the Council's policy to teach mouth-to-mouth resuscitation to as many people as possible, the Training Officer visited 27 schools during the year and over 6,200 pupils and members of staff received instruction; other special sessions for 280 teachers were held in 16 schools; in three technical colleges, 200 students received instruction.

The health services and health problems, including accidents were again popular topics for projects undertaken by school children. There were 98 written requests for information (and probably as many more personal calls from individuals) from the Section during the year; fifty of these were from schoolchildren; the remainder were from students, teachers and parents. When one thinks about the amount of information 'dispensed' each year by the health education officers, one cannot help but wonder what becomes of it and what use is made of it; seldom do we see the end product. Each year we receive a few letters which make us think—we wonder what the 14-year-old girl made of her project on the unmarried mother; we wonder what was the outcome of an investigation being made by a girl from a private school, into 'contraception, abortion and adoption'!

Apart from instruction given to schools and training colleges, the Training Officer gave many resuscitation demonstrations to other groups; among these were home helps (300) dental officers (12), school staff nurses (13), staff at Ham Green Hospital (30) and sewermen (50). Other talks and demonstrations were given to 32 groups, totalling over 1,000 individuals. As part of the work undertaken for the Occupational Health Service the Training Officer organised and participated in 16 full first aid courses undertaken by employees of Corporation departments.

Films

The film "A Future for Amanda" was completed by the Bristol Cine Society and officially handed over to the Chairman of the Social Services Committee on 11th November. The completion of this film by the Society marked 11 years of successful co-operation between the Department and the Society. It was in November 1958 that the first film, "Marlborough House", was handed over. In the next two years "Claremont" and "The Helping Hand" followed, and then after a further two years "Back to Claremont" appeared. Undoubtedly, these four films have formed a unique record of the education and training of handicapped children in Bristol. Apart from their educational merit, the films have brought much credit to the Health and Education Departments; the films are in constant demand and over the years there has been a steady sale of copies, accruing profits which have enabled the making of other films. The total viewing audience must run to several million, since several have appeared on British television; among the many prizes that "Claremont" won was an international festival in Australia, followed by a week's public showings

in Sydney cinemas. Together with "Back to Claremont", the film won a T.V. documentary award in Canada and both were screened in that country.

In 1963, "The Comfort Bringers" was made for the Bristol branch of the Queen's Institute of District Nursing and in 1968 the Society completed "Feet First".

"Amanda", the latest production, is already beginning to follow the same pattern of success of its predecessors. In November 1958 "Marlborough House" won the Bell Trophy in the Scottish Film Festival: in November 1969, "Amanda" won the same award.

Publications

Copies of the booklet "Drug Dependence" have sold steadily; by the end of the year this publication had completed six editions with 30,000 copies having been sold or distributed.

Two new posters were produced and have now been printed in modified form so that other local authorities may overprint their own details. The poster "Be Wise—Immunise", depicting a wise old owl, pointing with one wing to a syringe in which is set out our prophylaxis programme, was a modified version of a leaflet designed by one of our former health visitors, in a competition organised among our staff. Another poster "The Kiss of Life" was produced for our Water Safety Campaign, but has been in demand by other local authorities, as well as local industrial companies and Corporation departments.

Exhibitions and Competitions

The main exhibition and a competition, were connected with the Bristol Home Safety Council, and an account appears in the Council's report.

BRISTOL HOME SAFETY COUNCIL

There were 53 deaths caused as the result of an accident in and around the home. Once again, accidental falls claimed most lives, some 26 females and 9 males being the victims. The *average* age of the females was 83 years, the youngest being 62 and the eldest, two women each 98 years. The average age of the males was 76½ years, the youngest being 66 years and oldest 85 years. Looking at the range of ages it seems that the males succumb to accidental falls much earlier than do the females.

Poisoning caused the death of 4 females and 3 males. A woman of 80 died as the result of a leak in a gas main outside her flat; a 76-year-old woman accidentally inhaled coal gas and a woman of 54, whilst attempting to light a fire with a gas poker, inhaled the gas. Two tragedies occurred in bathrooms due to faulty geysers, a boy of 14 and a man of 31 lost their lives; these cases serve to emphasise yet again the necessity for householders to see that their gas appliances are regularly serviced and that bathrooms are properly ventilated. In the first 3 months of 1970 three similar cases have occurred. A 65-year-old man died from carbon monoxide poisoning after a fire of unknown origin had occurred in his home.

Four females and 3 males died from burns and scalds. An 83-year-old woman fell in front of a gas fire and her clothes came into contact with the flames; a double accident occurred to a 75-year-old woman whose clothes caught fire, causing her to fall and fracture a leg. A little girl of 12 months was fatally scalded when she fell into a washing machine. Two men, one 80 and the other 83, ignited their clothing when lighting a cigarette and a pipe and a 49-year-old male died when a fire occurred in his bed-sitting room.

Choking and suffocation accounted for the deaths of 3 males. A baby of one month suffocated in its cot and a little boy of 11 months somehow squeezed his head between the bottom and the side of his cot. Tragically a 16-year-old boy—probably 'fooling about'—accidentally hanged himself, suspended by a plastic belt from the bannister rail.

A most unusual accident occurred when an un-hung door was dislodged and fell on a 21-month-old baby boy, causing a head injury from which he died.

The pattern of accidents is very similar to past years, the elderly being the persons at greatest risk—probably because of failing faculties; followed by those whose faculties have not yet developed—the very young.

The main activities of the Home Safety Council during the year were, a continuation of the Water Safety Campaign, the exhibit at the Flower Show and a drama festival held in the autumn.

In the spring and early summer water safety publicity was increased. Two 'teach-ins' were held in May, one at Filwood and one at Henbury Baths. At each there were demonstrations of

personal survival, life saving and demonstrations of resuscitation; each session was followed by a film session at the nearby Local Health Authority clinic.

A poster competition organised in the schools produced 183 entries in the under-13 class and 114 in the over-13 year class. The entries were of a high standard and the judges, Mr. Crowe of the West of England College of Art, Dr. Buxton, University of Bristol, and the Children's Editor of the "Evening Post", had no easy task in selecting the winners. The Social Services Committee gave 12 guineas for the winning entries and these, together with Certificates of Merit, were presented to the young people by the Lord Mayor, Alderman Bert Wilcox, at the Council House.

At the Flower Show, the exhibit was entitled "Learn to Save a Life". The main features were demonstrations of mouth-to-mouth resuscitation. A group of very competent volunteers drawn from St. John's Ambulance Association, British Red Cross Society, Bristol Ambulance Service, health visitors, district nurses and Bristol City and Marine Ambulance Service manned the stand in relays and seldom has the Home Safety Council's exhibit attracted so much attention. During the 3 days of the Show there was hardly a moment when the stand was not surrounded with interested spectators and keen participants in the demonstration.

The Ethel Boyce Memorial Rose Bowl was the prize offered in a drama competition organised by the Assistant Secretary. This was the second time that such a competition was arranged since the Memorial Bowl was first awarded ten years ago.

Six branches of the Federation of Townswomen's Guilds took part in a two-night drama festival at the Y.M.C.A. Theatre. The plays, each lasting about 10 minutes, were written, acted and produced by members of the Guilds and their families. Each carried a theme connected with safety in the home: All were of a very high standard and the participants showed tremendous talent and enthusiasm. The winning play was performed by the Filton branch and was quite outstanding. Miss Sally Noble, a professional producer and one of the adjudicators, remarked on the very high standard of performance and the "professionalism" of those taking part. The Deputy Lord Mayor, Alderman Mrs. Castle, presented the Rose Bowl.

This competition was a tremendous success and already there have been requests for a similar competition to be held in the next year or two. The competition highlighted a great feature of successful health education, 'involvement'; not only the participants and their friends and families, but the audiences and those many volunteers who so willingly gave their time to act as stewards, stage hands, scene shifters and the young men who took charge of the lights and curtains. Everything worked so smoothly that one had the impression there had been months of rehearsal in this theatre; the performances were in fact being put on for the first time in that setting!

There have been the usual number of requests for information, material and talks; each year more young people seem to be interested in the subject of accident prevention and it is to be hoped that with more people becoming aware of the accident problem there may well be a marked reduction in fatalities and human injury.

Once again, the member organisations would like to put on record their thanks and appreciation to the Social Services Committee for its continuing support.

I. M. Lobb (Chairman)

P. Mackintosh (Secretary)

THE MENTAL HEALTH SERVICES

H. Temple Phillips
(Senior Medical Officer)

F. Morton
(Mental Health Officer)

K. R. Pennington
(Deputy Mental Health Officer)

SOCIAL WORK

The mental health section remained fully staffed throughout the year although secondment to full-time training courses resulted in a practical shortage of social workers.

Case loads were excessive and increasing. At the end of the year, there were 751 subnormal persons and 256 people suffering from mental illness, a total of 1,007 clients, receiving home visits from the social workers. Attempts were made to grade these into short-term and long-term categories, and further to classify according to the need for daily, weekly, monthly, quarterly or annual visits. It is calculated that approximately 13,000 home visits were made during the year by the 12 social workers and their six assistants, and these, in fact, only amounted to one third of the social workers' duties, the remainder of their time being occupied in dealing with mental health emergencies, compiling reports and returns, interviewing clients in the office, attending case conferences, visiting hospitals, hostels, and training centres, workshops, clubs and out-patient clinics, and in dealing with the property of mentally disordered persons who were unable to manage their own affairs.

During the latter part of the year, an evaluation was carried out of the work undertaken, of the pressures on the Section, and of the changing pattern of the needs of clients. From the results of this survey it became apparent that at least six additional mental welfare officers would be needed to enable the community mental health services to function at a satisfactory level.

MENTAL ILLNESS

During the year, 156 male and 228 female (a total of 384) mentally ill patients were referred to the mental welfare officers for services such as social work support, workshop or club attendance, or entry into hostels. The sources of these new referrals are shown in Table 'A' presented at the end of this report. These figures represent an increase of 121 over the previous year.

In addition, 120 men and 227 women—a total of 347—were referred for admission to psychiatric hospitals, a decrease of 17 as compared with 1968. In total, therefore, 731 new cases of mental illness were referred in 1969, as compared with 627 in 1968.

Table 'B' shows that 256 mentally ill persons were receiving help from the community mental health services at 31st December 1969—an increase of 38 over the figure of 218 recorded on 31st December 1968. Therefore the annual rise in case loads has persisted, despite the constant reviews which have taken place and the extreme care in the selection of new clients which has been absolutely essential in order to keep work down to a reasonable level.

SUBNORMALITY AND SEVERE SUBNORMALITY

120 new cases were referred during the year, and at 31st December 1969, 751 mentally subnormal and severely subnormal children and adults were receiving services from the mental health section (36 more than at the end of 1968). Home visits were made to each of these clients by mental welfare officers with a frequency dictated by the needs of the case.

443 were attending training centres or workshops, as follows :—

Bush Training Centre Special Care Unit	...	31
Bush Training Centre Junior Training Centre	...	144
Bush Training Centre Adult Training Centre	...	185
Stratton Street Day Centre	... ..	26
Snowdon Road Workshops	... ..	48
Industrial Therapy Organisation	... ..	9
		<hr/> 443 <hr/>

In addition, three children and 13 adults—a total of 16—were receiving daily care or training in the hospitals for the subnormal.

A further 21 men were housed for an indefinite period in hostel accommodation, while 58 children were provided with short term hostel care at various times throughout the year.

Waiting List

On 1st January 1969, there were 38 names on the waiting list for admission to the hospitals for the subnormal and severely subnormal. During the year, 38 names were added. Of the resultant 76, 26 (17 male and 9 female) were admitted to hospital, leaving a total of 50 awaiting vacancies at 31st December 1969.

Apart from those admitted from the waiting list, 28 males and 22 females—a total of 50—were admitted as a result of emergency situations, or for temporary residential care. Hospital admissions, therefore, totalled 76 during the year—22 more than in 1968.

A great deal of difficulty has been experienced in finding hospital vacancies, and much time has been spent in communication and discussion with the bed-controlling psychiatrists of the three groups of hospitals which provide a residential care service for Bristol.

The 76 admissions were arranged in accordance with the following sections of the Mental Health Act, 1959:—

			<i>Male</i>	<i>Female</i>	<i>Total</i>
Section 5 (Informal)	...	...	40	28	68
Section 25 (Detained)	...	...	1	—	1
Section 26 ( " )	...	...	2	3	5
Section 29 ( " )	...	...	—	—	—
Section 60 ( " )	...	...	2	—	2
			45	31	76

Hospital Day Care

It has still not been possible for the hospital authorities to provide special units for day care. The situation remains virtually unchanged and, at the close of the year, three children and 13 adults—a total of 16—were being provided with day care in the main hospital buildings—two more than in 1968.

OUT-PATIENT CLINICS

Mental welfare officers continued to attend psychiatric out-patient clinics at the request of some of the consultant psychiatrists who found the local authority social workers' support to be valuable. In addition, an increased number of pre-clinic visits were made so that full social histories could be available before patients came up for diagnosis and treatment.

"Assessment" clinics—which in effect are out-patient clinics for the mentally subnormal—were held, as in previous years, at the Central Health Clinic, and at the Bush Training Centre. These clinics, which have been in operation since June 1958, are extremely helpful, not only as a means of securing appropriate treatment for mentally subnormal and severely subnormal children and adults, but also because they provide an opportunity for psychiatric guidance to patients' relatives and the mental health section's social workers, teachers, and instructors. During the year, 55 new cases and 102 follow-up cases were seen. Of the total of 157 cases, 133 were Bristol residents, and the remainder were referred to the Clinic from neighbouring areas as follows:—

			<i>New Cases</i>	<i>Follow-up Cases</i>	<i>Total</i>
Bristol L.H.A.	...	...	46	87	133
Gloucestershire L.H.A.	...	...	5	12	17
Somerset L.H.A.	...	...	1	—	1
Wiltshire L.H.A.	...	...	2	2	4
Bath L.H.A.	...	...	—	2	2
			54	103	157

WORKSHOPS AND TRAINING CENTRES

Snowdon Road Workshops

Throughout 1969 this "industrial tempo raising" workshop for mentally subnormal men and women continued to function with all 50 places filled and with a short waiting list.

Despite the demand for places it was still possible to receive pupils on day release from the special schools for the educationally subnormal, and, during the year, 11 girls and 18 boys in this category together put in a total of 291 attendances in order to gain workshop experience during their final year at school.

A rewarding total of ten trainees (four men and six women) left the unit to enter employment in open industry during the year.

A number of visitors, both from the United Kingdom and from overseas, visited the workshop. Psychiatric nursing students made visits of observation each week, and social work training course students were provided with practical placements in the workshop at various times throughout the year.

As in the previous year, the main industry was the making up of dressing packs and cytology sets for the South Western Regional Hospital Board Supplies Department, but, in addition, a variety of simple assembly tasks were carried out for a number of local manufacturers.

Trainees were paid incentive allowances ranging from 15/- to 25/- per week according to their work output and attitude, a free mid-day meal was provided in the workshop, and bus fares were refunded. In addition, social security allowances were paid to the men and women by the Department of Health and Social Security.

Plans are well advanced for the provision of additional workrooms on this site.

Bush Training Centre

In the Junior Training Centre there was virtually no variation in the number of trainees attending. By the appropriate use of part-time places, it was possible to abolish the need for a waiting list, and at the end of the year there were 144 names on the register of the Junior Training Centre and 31 on the Special Care Unit list—a total of 175.

During the year the customary medical and dental examinations have taken place and hearing assessments have been made. As in previous years, the teaching staff have been supported and advised by the educational psychologist, the speech therapists, and a teacher of the deaf.

1,686 visitors passed through the centre during the year, and practical placements have been provided for students from the N.A.M.H. two-year training course for teachers of the mentally handicapped, the Bristol Polytechnic Certificate in Social Work course, and the Technical College Matron Housekeeper course.

A six-week evening course on speech development was conducted by the speech therapists for the benefit of parents of the children attending the centre.

The valuable gift of a mini-bus was made to the centre during the year by the Variety Club of Great Britain, and this has enabled the staff to take children on many visits of interest and instruction.

Open days were held during the summer and Christmas terms, and regular teacher/parent discussion groups were arranged throughout the year.

The following table shows the distribution of children by class and age groups at the end of the year:—

<i>Class</i>	<i>Age Group (Approx.)</i>	<i>Boys</i>	<i>Girls</i>	<i>Total</i>	<i>Number with Down's Syndrome</i>
Special Care Unit					
1	Up to 16	7	5	12	4
2	"	4	5	9	2
3	"	7	3	10	4
		18	13	31	10
Junior Training Centre					
Nursery 1	4 — 6	5	10	15	8
Nursery 2	6 — 7	8	6	14	6
Junior 3	7 — 8	11	4	15	5
Junior 4	8 — 9½	10	5	15	6
Junior 5	9½ — 11	9	6	15	5
Junior 6	11 — 12	8	6	14	7
Junior 7	12 — 13½	11	6	17	6
Junior 8	13 — 15	8	9	17	3
Junior 9	15 — 17	12	10	22	14
		82	62	144	60

Adult Training Centre

The number of names appearing on the register of the adult training centre is four less than it was 12 months ago. In December 1968 there were 189 on the register whilst in December 1969 the total was 185. During the year, 13 trainees were transferred to the advanced workshops at Snowdon Road, nine left to go into permanent hospital care, one to sheltered employment at Industrial Therapy Organisation (Bristol) Limited, one obtained employment, three left because their parents moved from the Bristol area, one to the 'Home Farm Trust', one for training for the blind, two left to be cared for at home (at parents' request) and six left for other reasons. Of the 35 new entrants, ten progressed from the junior training centre, on reaching the age of 17 years, and the remainder were referred from other sources.

A degree of overcrowding persists, but despite this the staff have created opportunities, whenever possible, to give social education in groups of appropriate number. The weekly use of the mini-coach for trips of educational and recreational value has undoubtedly benefited staff and trainees alike.

Existing industrial contracts have been maintained and three new contracts have been added :— cutting and packaging of beechwood toy blocks, collating and packaging carbon-papers, and pre-packaging items of ironmongery for the D.I.Y. market.

Set out below are the numbers on the register in age groups :—

<i>Age Group</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
15—20	26	20	46
21—25	27	31	58
26—35	31	20	51
36—45	8	8	16
46—55	3	3	6
56—65	5	2	7
66—75	1	—	1
	101	84	185

Evening classes continued to be a popular venture, with constant requests to join coming from members of the adult training centre who had not previously participated. The latest addition to these classes was the "sewing class" which commenced in January 1969.

Stratton Street Day Centre

At the close of the year there were 13 boys and 13 girls—a total of 26—attending this special care unit for severely mentally retarded and physically disabled children. There was, therefore, an increase of four places as compared with 1968.

Children benefited, as previously, from physiotherapy and from weekly water play carried out in the Bush Training Centre swimming pool.

Regular medical and dental examinations took place.

Working conditions continue to present the staff with difficulties and the remedy cannot be found in the present limited accommodation.

HOSTELS

Residential Unit for Mentally Subnormal Children—Hengrove

Staff shortages continued throughout 1969 but it is believed that this difficulty will be relieved on 1st January 1970 when a newly appointed Resident Assistant Matron will commence her duties.

During the year, there have been 118 admissions of children for short-term care as follows :—

January	... 10	August	... 14
February	... 13	September	... 2
March	... 13	October	... 13
April	... 5	November	... 6
May	... 8	December	... 6
June	... 17		
July	... 11		118

58 families have benefited from this service at times of social emergency or during holiday periods.

These numbers show a small decrease when compared with those published in 1968 and this has, in part, been due to the need to restrict the service at times of extreme staff shortage.

Marlborough House Hostel

This 24-place hostel for subnormal men was used almost to the limit throughout the year, the average occupancy being 23·48 compared with 19·75 in 1968; 17·20 in 1967 and 14·14 in 1966.

During the year there were four admissions for long term care. Of these, two came from hospital and two from the care of relatives. Six residents left the hostel and of these, two went into hospitals for the subnormal, three were accommodated with relatives, and one moved into lodgings.

In addition, four men were provided with short-term care during periods of social emergency, or to allow relatives to take a holiday.

The number in residence on 31st December 1968 was 23. At the close of 1969 there were 21 men living in the hostel but two of the three vacancies were allocated to new residents due to move into the hostel at the commencement of the new year.

The unit continued to play a most important part in the local authority rehabilitation programme.

Devon House Hostel

Although there have been periods of under-occupancy during the year, this hostel for the rehabilitation of men and women who have suffered from mental illness has again served such a valuable purpose that the hostel policy and the criteria for admission have remained unchanged.

The year commenced with nine men and four women—a total of 13—in residence, and on 31st December 1969, 13 of the 14 places were occupied.

During the year there was a rewarding turnover of residents, 13 having left the unit to be replaced by 13 new clients.

Of the discharges, one woman went into a psychiatric hospital, nine men moved into lodgings, two women left to occupy bed-sitting rooms, and one woman moved into residential employment.

Of the new residents, nine came from hospitals, two from the care of relatives, one from lodgings, and one from a hostel operated by a voluntary organisation.

The following table shows the length of hostel care provided for those residents who moved out during the year :—

				<i>Men</i>	<i>Women</i>	<i>Total</i>
6 months or less	...	...		4	2	6
7—12 months	...	...		1	2	3
13—18 months	...	...		1	—	1
19—24 months	...	...		2	—	2
5 years	...	...	...	1	—	1
				9	4	13

An active rehabilitation programme has been carried out by the combined efforts of the hostel staff and the mental welfare officers, and increasing success has been achieved in integrating the residents into the local community.

Petherton

After 20 months of operation, this hostel for 35 elderly mentally infirm residents is well established, and its value has been confirmed. The unit was fully occupied throughout the year, and new entrants were selected from a considerable waiting list before beds were actually vacated.

The great pressure on the few beds has underlined the need for careful assessment of residents, and this has been carried out at regular conferences attended by the Senior Principal Medical Officer, a consultant psychiatrist, and a consultant geriatrician together with the mental welfare officers.

From time to time, difficulties have been experienced in securing hospital beds for residents who deteriorated to a degree which made them unsuitable for hostel care. Additional strain has thus been imposed on the hostel staff who have had to provide full nursing care for a number of severely physically ill residents during the year.

The degree of incontinence experienced in Petherton has exceeded that which was initially anticipated, and it appears to be inevitable that in this type of accommodation, 90% of the residents can be expected to have some degree of incontinence.

The following figures relate to admissions and discharges during the year :—

ADMISSIONS—YEAR ENDED 31st DECEMBER, 1969

	<i>Male</i>	<i>Female</i>	<i>Total</i>
From home address	1	10	11
From Part III accommodation	—	1	1
From geriatric hospitals	1	1	2
From psychiatric hospitals	—	2	2
	2	14	16

DISCHARGES—YEAR ENDED 31st DECEMBER, 1969

	<i>Male</i>	<i>Female</i>	<i>Total</i>
Died in Petherton	1	2	3
Returned to home address	1	4	5
Transferred to Part III accommodation	2	2	4
Admitted to geriatric hospitals	—	2	2
Admitted to psychiatric hospitals	—	2	2
	4	12	16

It is of interest to note that it was possible to transfer four residents to normal old persons' homes during the year. Two of these had entered Petherton from psychiatric hospitals, and two from their own homes—all had been unsuitable for Part III accommodation when first referred.

Of the five men and women who went back to their own homes, four had been accepted into the hostel essentially for temporary care. Two of these women were subsequently re-admitted as long-term residents.

CLUBS

Somerset House Social Therapy Club

The year commenced with 51 club members and closed with 56. The club was open on 249 days during the year and there was an average daily attendance of 28.

Transport by the Ambulance Service was arranged for 19 members, the remainder making their own way to the club, travelling by public service vehicles.

The usual programme of handicrafts, social activities, games, play reading, keep fit, dancing, cooking and hairdressing was pursued. In addition, a number of outings were organised and special club sessions (e.g. Easter service, harvest celebration, carol service, and Christmas party) were held.

As a new venture a Post Office Savings Group scheme has been initiated in the club.

Steeven's House

There has been a small increase in the membership of this afternoon club for elderly mentally infirm men and women. There are now 28 names on the register as compared with 26 in 1968. Attendance has been very satisfactory and frequently as many as 23 of the members have been found in the club at one time.

Simple games and handicrafts are enjoyed by all the elderly members and a vigorous programme of entertainments and outings has been arranged.

The more capable of the 'Petherton' residents are taken to the club daily, and benefit considerably from the change of environment.

All members are conveyed by special transport.

Townsend Youth Club

Overcrowding at the Thursday 'mixed night' sessions and inability to accept new members from the waiting list have been among the issues which have received the close attention of the management committee of this youth club for the mentally handicapped during the year.

Reorganisation of club sessions and transport arrangements will be recommended to the next club annual general meeting.

Despite these difficulties the club has moved from strength to strength during the year. There is now a membership of 100, and the leaders are well supported by the voluntary services of many parents of club members.

The activities of the club have been further extended during the year, and every effort has been made to run the club on similar lines to a normal youth club.

TABLE A
MENTAL HEALTH STATISTICS FOR 1969
NUMBER OF PERSONS REFERRED TO LOCAL HEALTH AUTHORITY DURING THE YEAR ENDED 31st DECEMBER, 1969

	<i>Mentally ill</i>						<i>Psychopathic</i>						<i>Subnormal</i>						<i>Severely subnormal</i>					
	<i>Under age 16</i>			<i>16 and over</i>			<i>Under age 16</i>			<i>16 and over</i>			<i>Under age 16</i>			<i>16 and over</i>			<i>Under age 16</i>			<i>16 and over</i>		
	<i>M</i>	<i>F</i>	(1)	<i>M</i>	<i>F</i>	(2)	<i>M</i>	<i>F</i>	(3)	<i>M</i>	<i>F</i>	(4)	<i>M</i>	<i>F</i>	(5)	<i>M</i>	<i>F</i>	(6)	<i>M</i>	<i>F</i>	(7)	<i>M</i>	<i>F</i>	(8)
<i>Referred by</i>																								
(a) General practitioners ...	1	—	1	21	52	—	—	—	—	—	—	—	1	—	1	—	1	—	—	—	—	—	—	—
(b) Hospitals, on discharge from in-patient treatment ...	—	—	—	18	18	—	—	—	—	—	—	—	—	—	—	5	2	2	1	2	2	—	—	—
(c) Hospitals, after or during out-patient or day treatment ...	—	—	—	29	48	—	—	—	—	—	—	—	1	—	2	—	—	1	1	—	—	—	—	—
(d) Local Education Authorities ...	—	1	—	—	—	—	—	—	—	—	—	—	1	5	14	12	2	5	—	—	—	—	—	—
(e) Police and Courts ...	—	—	—	13	7	—	—	—	—	—	—	—	—	—	2	1	—	—	—	—	—	—	—	—
(f) Other sources ...	—	—	—	74	102	—	—	—	—	—	—	—	8	4	17	8	9	9	2	1	—	—	—	—
(g) Total ...	1	1	1	155	227	—	—	—	—	—	—	—	11	9	41	24	13	17	4	1	—	—	—	—

TABLE B

MENTAL HEALTH STATISTICS FOR 1969

NUMBER OF PERSONS UNDER LOCAL HEALTH AUTHORITY CARE AT 31st DECEMBER, 1969

	Mentally ill				Elderly mentally infirm				Psychopathic				Subnormal				Severely subnormal				TOTAL
	Under age 16 and over				Under age 16 and over				Under age 16 and over				Under age 16 and over				Under age 16 and over				
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)			
1. Total Number	...	—	87	122	11	36	—	—	—	39	30	49	100	117	131	194	91	1,007			
2. Attending workshops, day centres, or training centres (including special units) ...	—	—	3	2	—	—	—	—	—	21	8	31	53	86	72	96	71	443			
3. Awaiting entry to workshops, day centres, or training centres (including special units) ...	—	—	—	—	—	—	—	—	—	1	—	—	—	2	6	—	—	9			
4. Receiving home training	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
5. Awaiting home training	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
6. Resident in L.A. home/hostel ...	—	—	8	4	6	28	—	—	—	—	—	5	—	—	—	6	—	57			
7. Awaiting Residence in L.A. home/hostel ...	—	—	—	—	5	8	—	—	—	—	—	—	—	—	—	—	—	13			
8. Resident in other home/hostel ...	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1			
9. Boarded out in private household ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
10. Attending day hospitals ...	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	10	3	16			
Receiving home visits and not included in lines 2-10	(a) suitable to attend a training centre	—	—	—	—	—	—	—	—	—	1	5	9	2	1	12	14	44			
(b) others		75	116	—	—	—	—	—	—	17	21	8	38	25	51	70	3	424			

TABLE C
MENTAL HEALTH STATISTICS FOR 1969
NUMBER OF PATIENTS AWAITING ENTRY TO HOSPITAL, ADMITTED FOR TEMPORARY RESIDENTIAL CARE
OR ADMITTED TO GUARDIANSHIP DURING 1969

	Mentally ill				Elderly mentally infirm				Psychopathic				Subnormal				Severely subnormal				TOTAL				
	Under age 16				16 and over				Under age 16				16 and over				Under age 16					16 and over			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)							
1. Number of persons in L.H.A. area on waiting list for admission to hospital at end of year																									
(a)	in urgent need of hospital care ...				...	—	—	—	—	—	—	—	—	2	—	—	—	6	6	2	2	18
(b)	Not in urgent need of hospital care ...				...	—	—	—	—	—	—	—	—	2	1	7	—	5	3	9	5	32
(c)	Total ...				...	—	—	—	—	—	—	—	—	4	1	7	—	11	9	11	7	50
2. Number of admissions for temporary residential care (e.g. to relieve the family)																									
(a)	To N.H.S. Hospitals				...	—	—	—	—	—	—	—	—	—	—	8	10	—	—	23	8	49			
(b)	To L.A. Residential accommodation	—	—	—	2	12	—	—	—	—	1	1	—	—	59	53	—	—	128		
(c)	Elsewhere ...				...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(d)	Total	—	—	—	2	12	—	—	—	—	1	1	8	10	59	53	23	8	177		

AMBULANCE SERVICE

E. C. G. Joy

(Chief Ambulance Officer)

The year 1969 saw the coming of age of the Bristol Ambulance Service, 21 years having elapsed since the inception of the service under the National Health Service Act in 1948.

It is perhaps an appropriate time to look back and review the changes that have occurred in this period. The year 1949 was the first full year of operation of the service and it is interesting to compare the statistics of that year with those of 1969.

The following illustrate the variations in terms of staff, vehicles, patients and mileage, including those of the supplementary services.

				1949	1969
1. <i>Establishment of drivers</i>				100	108
2. <i>Ambulances</i>				28	34
<i>Sitting case vehicles</i>				8	24
3. <i>Patients conveyed</i>	Ambulance Service	...	...	65,801	179,560
	St. John	...	...	1,230	—
	City and Marine	...	...	4,177	—
	W.V.S.	...	...	16,994	5,381
	Taxis	...	...	2,374	2,469
	Totals	...		90,576	187,410
4. <i>Mileage</i>	Ambulances	...	...	376,376	473,878
	Sitting Case vehicles	...	...	160,411	362,292
	St. John	...	...	10,207	—
	City and Marine	...	...	26,343	—
	Taxis	...	...	11,543	15,698
	W.V.S.	...	...	311,823	54,561
	Totals	...		896,703	906,429
5. <i>Cases by Classification</i>	Emergencies	...	...	5,528	8,969
	Maternity	...	...	3,914	1,871
	Infectious Diseases	...	...	1,791	237
	General	...	...	79,343	176,333
	Totals	...		90,576	187,410

VEHICLES

During the years many types of vehicles have been used as ambulances. It is true to say that at the present time no vehicle is available which has been designed specifically for ambulance purposes. A Dennis vehicle based on the Working Party Report and specifications is in the process of development, but ambulance services generally have to be content with adaptations of light commercial chassis on which ambulance bodies are constructed.

Nevertheless, the Bristol Ambulance Service, in conjunction with the British Motor Corporation and Appleyards of Leeds, have evolved an ambulance which is considered to be the equal of any in general use in the country.

The service has standardised the fleet on two types of vehicles :

- (1) The large dual purpose ambulance capable of carrying two stretcher patients or up to 9 sitting patients, based on the B.M.C., FGK 300, 10' 9" chassis. It allows the patients to be carried between the wheel axles, thus giving a comfortable ride under the various loading conditions that may occur.
- (2) The smaller sitting case vehicle can carry up to 11 sitting patients and is equipped to carry a stretcher case if required. This is based on the B.M.C. JU 250 chassis.

The latest specification includes the provision of automatic transmission on both types of vehicles. It helps to produce a smoother ride for the patients, whilst relieving the driver of the many gear changes operating in a heavily congested County Borough necessitates.

Standardisation has helped in maintaining a high degree of mechanical and operational efficiency.

EQUIPMENT

Over the years the amount of equipment carried by an ambulance has increased, and recently the working party report on equipment indicated the scale an ambulance engaged on emergency work should carry. The following is the inventory of equipment carried by Bristol Ambulances :

Trolley stretcher (two) and mattresses	Plastic Aprons (two)
Blankets (six)	Crowbar
Pillows (three)	Bed pan
Electric blanket	Male urinal (alkathene)
Plastic draw sheet	First aid box and satchel
Plastic sheet (patient cover)	Maternity pack
Manifold harness	Disposable gloves (six pairs)
40' nylon lashing	Hays splint
Incontinence pads	Wooden leg splints (long & short)
Blood transfusion bottle holder	Pneumatic arm splint
Paper towel dispenser	Oxygen cylinder & Regulator
Thermos flasks (two)	Oxygen disposable masks (twelve)
Portable attendant seat	Brook airway
Carrying chair	Vomit bowl (stainless steel)
Loading light	Vomit bags (six)
Plastic pedal bin	Alloy poles & nylon sheet
	Minuteman Resuscitator

STAFF

The conditions of service of ambulance staff have been the subject of vast improvements over the years. 1969 saw the introduction and implementation of a national pay structure in which, for the first time, pay was related to the scope of duties performed, training undertaken and qualifications.

The Department of Health and Social Security, in conjunction with the Local Authorities Associations and the Local Government Training Board, have established an Ambulance Service Advisory Committee. This committee has three sub-committees dealing with :—

- (a) Training of ambulance staff
- (b) Equipment
- (c) Vehicle design

It is in the field of training of staff that the most significant developments have taken place. The year under review saw the start of secondment of staff from the Bristol service to the Hampshire Training School. Courses have been of two weeks' duration and staff with between two and five years' service have been attending for refresher training in ambulance aid. These courses have been extremely beneficial and staff attending have appreciated the opportunity. It is pleasing to note that results obtained indicate the Bristol Ambulance Service has staff whose knowledge and skills are of a very high standard.

Staff of the Ambulance Service attending such courses qualify for the Proficiency Certificate issued by the Ambulance Service Advisory Committee. This is a permanent qualification and replaces the First Aid Certificate of the voluntary organisations.

In conjunction with the medical and nursing staff at the Bristol Royal Infirmary a local scheme was commenced whereby each week an ambulanceman is seconded to the hospital for training purposes. The following shows the programme arranged. This has been extremely well received by the hospital staff and ambulance personnel.

BRISTOL ROYAL HOSPITAL

TRAINING PROGRAMME FOR AMBULANCE CREWS

MONDAY	8.00 a.m.	Accident Department	Miss S. E. Doyle Sister in Charge
	1.00 p.m.	Capern Ward	Miss M. M. James Sister in Charge

TUESDAY	8.00 a.m.	Greig Smith Theatre	Miss M. M. Nicol Sister in Charge
	1.00 p.m.	Monica Wills Ward	Mr. N. Convy Charge Nurse
WEDNESDAY	8.00 a.m.	Fracture Clinic	Miss P. R. B. Jacobs Sister in Charge
	1.00 p.m.	Intensive Therapy Unit	Mr. J. W. Stevens
THURSDAY	Accident Department all day.		
FRIDAY	2.00 p.m.	Accident Department	

Hours of duty 8.00 a.m. to 4.00 p.m. daily, Monday to Thursday;
Friday 2.00 p.m. to 10.00 p.m.
Thursday afternoon may be used for any special experience required.

PROCEDURES TO BE TAUGHT TO AMBULANCE CREWS

- | | |
|------------------|------------------------------------|
| 1. Reception | of accidents and emergencies |
| 2. Observations | Pulse |
| | Respiration |
| | Level of consciousness |
| | Blood loss |
| 3. Positioning | of patients |
| 4. Assessment | of priorities in multiple injuries |
| 5. Resuscitation | |
| 6. Treatment | of accidents |
| | Overdose |
| | Medical emergencies |
| | Surgical emergencies |

The close liaison between the hospital and ambulance staff has helped to heighten the awareness of the part both play in the treatment and well-being of the patient.

During the year the Deputy Chief Ambulance Officer, Mr. G. Hastings, qualified as Ambulance Instructor at one of the initial courses run under the auspices of the Department of Health and Social Security.

Our thanks are due to the Hospital Car Service and Taxi Association in assisting the Ambulance Service to meet its day-to-day commitments.

Though the number of patients moved by rail has declined, the staff of British Railway continue to give every assistance to the Ambulance Service in the movement of stretcher cases over lengthy distances, for which our thanks are also due.

The mechanical maintenance of the fleet continues to be excellently carried out by the staff of the Transport section of the City Engineers and close co-operation between officers of the two services ensure problems are dealt with speedily and effectively.

CARE AND AFTER CARE

CARE OF THE AGED

J. F. Skone

(Deputy Medical Officer of Health)

STATUTORY SERVICES

CO-ORDINATION

Dr. W. H. Lloyd, Consultant Physician, United Bristol Hospitals, South Western Regional Hospital Board and Social Services Committee reports as follows:—

The Bristol geriatric services cater for a population of about 700,000. The main concentration of population is Bristol with about 430,000 people; South Gloucestershire from Dursley and Wotton-Under-Edge downwards account for most of the remaining population at risk. A co-ordinator for the geriatric services for Bristol C.B. was appointed in 1966: the cost of him was shared between the United Bristol Hospitals, South Western Regional Hospital Board and the Health and Social Services for Bristol C.B. Immediately prior to his appointment there had been 897 beds designated as geriatric or chronic sick in Bristol distributed as follows:— Manor Park H.M.C. 591, Southmead H.M.C. 246, Cossham and Frenchay H.M.C. 60. Apart from 130 beds at Manor Park which were in the clinical charge of Dr. William Hughes, the remaining beds were in the charge of five general physicians, one general physician having the clinical charge of just over 400 beds at Manor Park Hospital. The Co-ordinator of Geriatric Services was given clinical charge of 356 beds at Manor Park Hospital and was promised in addition some 35 beds within the teaching hospital within four or five years of his appointment.

Dr. Hughes' successor, Dr. G. R. Burston, was appointed in August 1969. The terms of his appointment differed significantly from those of Dr. William Hughes. He was based on Southmead Hospital and assumed clinical charge of the geriatric beds within the Southmead Group previously the responsibility of general physicians. He also assumed clinical charge of Dr. Hughes' 130 beds at Manor Park.

The present day situation therefore is that Cossham and Frenchay H.M.C. have 60 beds at Frenchay Hospital classified as geriatric or chronic sick and in the clinical charge of three general physicians with an interest in geriatrics. Dr. G. R. Burston based on Southmead Hospital has 176 beds between Southmead, Ham Green and Thornbury Hospitals in addition to 130 beds at Manor Park. Dr. H. G. Mather, who has general medical beds at Southmead, retains 61 beds at Manor Park. Dr. W. H. Lloyd has approximately 350 beds available at Manor Park. At Manor Park also, a 20-bedded psycho-geriatric assessment unit has been established which is run by Dr. Lloyd and Dr. Nicholas who took up his appointment as Consultant Psychiatrist in August 1969. Thirty-five beds will be available for the development of an acute geriatric unit within the United Bristol Hospitals towards the end of 1970. A third consultant physician in geriatric medicine will be advertised shortly. This will be a joint post between the United Bristol Hospitals and the South Western Regional Hospital Board with beds at the Bristol General and at Manor Park Hospitals. A fourth geriatrician based on Frenchay Hospital, with acute beds in Frenchay, will be appointed as soon as their nursing situation permits.

From October 1969 Dr. Burston and Dr. Lloyd divided the area between them. It is proposed that with further consultant appointments, further sub-divisions of the area will take place. From this it will be apparent that the Bristol geriatric services are in a state of change if not chaos. This report will deal with the activities of the unit in Manor Park run by Dr. W. H. Lloyd.

Beds

This unit consists of 354 available beds divided functionally as follows:—

1. Acute assessment wards, Churchill North & South	...	...	56 beds (28 male)
2. Fast rehabilitation wards, Somerdale East & West	...	...	60 beds (20 male)
3. Slow rehabilitation wards including } St. Andrew's East & West }			70 beds
holiday & intermittent admission } Oldbury Ward }			
4. PredischARGE unit & day hospital, Cotswold Ward	...	...	10 beds (4 male)
5. Ambulant demented ward, Nibley Ward	...	...	47 beds
6. Long-stay wards—2 male, 4 female	...	...	111 beds (37 male)
Total			354 beds (89 male)

These 354 beds are contained in fifteen separate wards in four separate buildings in the hospital grounds. Apart from Churchill Ward, which is a modern prefabricated unit, the building standards fall short of those laid down by the Department. Day space, bed spacing and sanitary arrangements are particularly poor.

Nursing Staff

Two years ago we were fortunate to gain a first-class Principal Nursing Officer with a genuine interest in, and considerable knowledge and experience of, geriatric medicine. Although almost as much work needs to be done on the nursing front as in all other aspects the foundation is now well and truly laid.

	<i>Establishment</i>	<i>In Post</i>
Ward Sisters or Charge Nurses	34	33
Staff Nurses	32	18
Student Nurses	Nil	Nil
Senior State Enrolled Nurses	8	10
State Enrolled Nurses	61	56
Pupil Nurses	68	62
Nursing Auxiliaries	129	152
Ward Domestic Assistants	81	79

Medical Staff

1 Consultant Physician	W.T. with 7 sessions at Manor Park
1 Medical Assistant	W.T.
1 Senior Registrar	P.T. 6 sessions
1 Registrar	W.T. (shared with Dr. Burston since January 1970)
2 Senior House Officers	W.T.

Social Work Department

Since 1966 it has been possible to build up the Social Work Department for the hospital as a whole. It consists of a Head Social Worker and Student Supervisor, Grade II, with four trained social workers and four untrained social work assistants. The department provides practical placements and supervision for students from Bristol Polytechnic undergoing the two year Young-husband course. Two trained and two untrained social workers work in Dr. Lloyd's unit.

Occupational Therapy Department

Since 1966 it has been possible to build the Occupational Therapy Department for the hospital as a whole. It consists of a head occupational therapist, a senior occupational therapist and three basic grade trained occupational therapists with ten untrained helpers. This has become an energetic effective unit with a central department providing useful facilities. The equivalent of three trained occupational therapists and five untrained helpers work on Dr. Lloyd's unit.

Physiotherapy Department

This consists of a superintendent physiotherapist, an assistant superintendent, three W.T. physiotherapists and a further nine part-time physiotherapists producing three W.T. equivalents. Three W.T. physiotherapists work in Dr. Lloyd's unit.

Discharges, Deaths

In the year ended 31st December 1969 the unit of 354 beds dealt with 1,151 discharges and deaths (760 discharges, 391 deaths). Roughly two-thirds of these cases were dealt with in the assessment unit, fast rehabilitation and predischarge unit. The remaining one-third of these cases were dealt with in the slow rehabilitation unit and long-stay wards.

Out-Patients

A consultative and follow up Out-patients Department was started in 1967. The table below shows a steadily increasing activity.

<i>Year</i>	<i>No. of new patients</i>	<i>Total out-patient attendances</i>
1967	75	490
1968	106	886
1969	399	1,311

Day Hospital

A fifteen-place Day Hospital attached to a Predischarge Unit of ten beds was opened in 1968; owing to transport difficulties it is available only for patients living in the adjoining portions of the City.

<i>Period</i>	<i>No. new patients</i>	<i>Total attendances</i>
1.2.68 to 31.1.69	65	1,754
1.2.69 to 31.12.69	41	2,857

Psycho-Geriatric Assessment Unit

A Psycho-Geriatric Unit of 24 beds (4 male) was established in Manor Park Hospital in August 1969. This is run jointly by Dr. Lloyd and Dr. Nicholas, Consultant Psychiatrist. Dr. Nicholas has a special interest in the psychiatry of later life and in addition to the beds in the Psycho-Geriatric Assessment Unit has clinical charge of 350 beds in Glenside Psychiatric Hospital near Manor Park. It is felt that the Unit has been running for too short a time to warrant any detailed comment.

As indicated earlier in the introduction, Dr. Burston was appointed to Southmead and Manor Park in August 1969, and it is felt that his Unit has been running for too short a time to warrant any detailed comment.

SOCIAL SERVICES COMMITTEE

The Social Services Committee is responsible for domiciliary services for many old people including:—

Chiropody Service

The chiropody service for the elderly was not expanded during 1969 although more people were treated than the previous year. This meant that patients in clinics and at home had a longer interval between treatments than is considered desirable. There were complaints from the elderly patients that pain is restricting their mobility, and their ability to live a reasonably peaceful life in carrying out their normal functions. A review of the number of clinical sessions is being carried out to relieve this situation as most clinics are working to the limit of capacity.

Statistical Analysis (figures in parentheses are for 1968)

Number of elderly persons at at 31st December on list	...	...	...	...	8,448 cases (7,961)
Discharges during 1969	...	...	...	...	1,441 ,, (1,443)
Total elderly					9,889 ,, (9,404)
Number of expectant mothers on list	...	...	...	...	10 (5)
Discharges	...	...	...	...	6 (4)
Total					16 (9)
Physically handicapped on list	...	...	...	...	121 (91)
Discharges	...	...	...	...	21 (11)
Total					142 (102)
Schoolchildren	...	...	...	...	1,845 cases (1,397)
Total number of cases (all sources)					11,892 cases
Number of treatments (all patients):					
In clinics	...	...	...	...	24,496 (23,522)
Domiciliary visits	...	...	...	...	10,782 (10,796)
Welfare homes	...	...	...	...	3,769 (3,948)
Schoolchildren (all in clinics)	...	...	...	...	8,415 (6,541)
Total treatments					47,462 (44,807)

The slight reduction in the number of treatments for domiciliary patients was due to the prolonged sickness absence of one member of the staff. Part of this loss was made up by other members of the staff working overtime duties to cover the more essential cases, but obviously only

a small proportion of the whole of his cases would be treated. New full-time staff have taken over duties from part-time staff who have left the chiropody section. There are twelve full-time chiropodists and eleven sessional chiropodists. The full-time staff are responsible for most domiciliary visiting but three carry out clinical duties only.

The application of simple appliances for elderly and handicapped cases is extremely valuable to assist them in walking. When muscles are unable to sustain their function the patients complain and the situation is worsened when patients twist their feet to obtain relief. Appliances fitted into the shoes assist muscles unequal to the task imposed upon them and aid function. In other cases patients may go longer between treatments.

As the list of patients is much larger than staff can treat at ideal intervals, and is likely to be so for the foreseeable future, the provision of efficient appliance-making facilities would be of the greatest benefit in enabling elderly patients to accept the increased interval between treatments.

The charge for chiropody was increased during the year from 3s 0d to 3s 6d for clinical treatments and from 3s 6d to 4s 6d for domiciliary treatment. This modest increase was accepted by the patients without protest.

Retirement Clinics

Dr. D. W. Maxa, Departmental Medical Officer, reports about St. George Health Centre.

The Retirement Clinic at St. George Health Centre continues to examine comprehensively those attaining the age of 65 years with the twin aims of the prevention of disease and difficulties where possible and the early ascertainment of medical and social needs. Numerically half of the number attending for the first time were considered to require review once or twice on average in order to assess progress or for further discussion of particular difficulties.

Only 1 in 11 new patients were found to be fit for their age. The most common problems were those of nutrition — mainly significant overweight (1 in 3 females), but also appreciable numbers underweight (1 in 10 females and 1 in 6 males). The other main causes of morbidity remain cardiovascular disorders (rather more than 1 in 3 patients), locomotor disorders (1 in 4 patients) and respiratory disorders (1 in 7 patients).

The findings are summarised below :

New Patients					Males	Females
Totals	...	...	...	...	42	68
Fit for their age	...	...	...	...	4	6
Nutrition						
Overweight (20% and more)	...	...	...	...	9	23
Underweight (10% and less)	...	...	...	...	7	7
Anaemia (80% and less)	...	...	...	...	3	9
Cardiovascular disorders						
Hypertension (170/110 and more)	...	...	...	...	6	9
Circulatory defects	...	...	...	...	6	3
Varicose veins	...	...	...	...	2	7
Abnormal electrocardiograms	...	...	...	...	9	7
Locomotor disorders						
Arthritis	...	...	...	...	3	6
Minor foot defects	...	...	...	...	7	12
Chronic chest conditions	...	...	...	...	9	6
Genito-urinary conditions	...	...	...	...	3	3
Special senses						
Eye defects	...	...	...	...	1	7
Hearing defects	...	...	...	...	1	1
Psychological disorders					2	9
Referrals:						
To General practitioner	...	...	...	...	9	8
Dietician	...	...	...	...	2	17
Physiotherapist	...	...	...	...	4	1
Chiropodist	...	...	...	...	5	9
Old Patients						
Totals	...	...	...	...	17	38
Re-attendances	...	...	...	...	22	64

Dr. Patricia Thomas reports about the retirement clinic at Corbett House :—

At Corbett House a Geriatric Clinic was only held for the first six months of the year as the second six months was devoted to examining new admissions at the Old People's Home, "West

Leigh", St. George. During the first six months 24 males and 18 females were examined and the findings were as follows :—

	Males	Females
Hernia	1	—
Enlarged prostate	1	—
Hypothermia	1	—
Hypertension	3	5
Obesity	2	8
Urine—calcium	6	3
Eye defect	—	2
Foot defects	3	1
Heart failure	1	—
Varicose veins	—	1
Underweight	2	1
Deafness	3	1

The case of heart failure had not attended a doctor for ten years and the enlarged prostate has now been operated on. Both have responded well.

Home Help Service

At the end of the year there were 14 full-time and 691 part-time home helps, a decrease of two full-time and an increase of 6 part-time home helps as compared with the previous year.

Home helps gave 659,143 hours of help during the year of which 635,676 hours or 96 per cent were devoted to the assistance of a total of 4,399 old and chronically sick people, an increase of 163 compared with 1968.

Laundry Service

The service organised by the department whereby draw sheets and nightgowns are made available and laundered for bedfast and incontinent persons, continued during the year. Although there was not such a dramatic increase in the number of persons using the service as in previous years, nevertheless the need for the service was well in evidence and was maintained accordingly. Transport for the collection of soiled linen and delivery of laundered sheets and gowns continued to be provided by the staff at the Disinfecting Station, whilst the actual laundering of the articles was carried out in the laundry operated at 100 Fishponds Road by the Welfare Services Section.

Details of the service were as follows :

Number of visits ...	18,027
Articles laundered ...	43,091
Mileage	16,698

The number of persons for whom the service was provided was 656. Of these, 286 patients were transferred from 1967. In addition sheets and gowns were issued on temporary loan to 50 patients, but laundry facilities were not required.

The Social Services Committee contributed £350 to Bristol Old People's Welfare Incorporated, towards the laundry service maintained by that organisation.

HOUSING COMMITTEE

(a) Pre-War Estates

During the year a further two houses were converted to make four flats making a total to date of 150 conversions providing 300 units of accommodation.

(b) Post-War Programme

By the 31st December 1969, 4,586 one-bedroom and bedsitting-room units had been completed.

The units completed during 1969 were distributed as follows :—

Lockleaze ...	19
Hengrove ...	14
Hartcliffe ...	11
Easton ...	14
Stockwood ...	35
St. Paul's ...	40
	<hr/>
	133
	<hr/>

These dwellings, with the exception of the 40 units at St. Paul's, were purpose-built elderly persons' dwellings, representing 69·9% of the total of 133.

There are 177 one-bedroom units of accommodation under construction of which 136 (76·1%) are specifically for elderly persons.

(c) *Proportion of Small Units of Accommodation*

	<i>1B/BSR</i>	<i>Total No.</i>	<i>%</i>
Pre-war & post-war	5,160	44,091	11·7
Post-war	4,586	29,207	15·7
Contracts scheduled for completion in 1970 ...	109	286	38·1
Projected totals as at 31.12.70 (post-war) ...	4,695	29,493	15·9
Contracts scheduled to commence in 1970 ...	219	598	36·6

VOLUNTARY SERVICES

BRISTOL OLD PEOPLE'S WELFARE INCORPORATED

This voluntary body, which receives a grant from the City Council, provides the following services :—

Accommodation

"Anchor House", 14 Eaton Crescent, BS8 2EJ in conjunction with the Anchor Society—11 unfurnished flatlets for able-bodied elderly people with sitting-room and dining-room; lift; central heating, launderette. Mid-day meal provided.

"Beverley Cottage", 41 The Esplanade, Burnham-on-Sea—a holiday rest home for 20 frail elderly people. Open all the year.

"Cote", Cote Drive, Westbury-on-Trym, BS9 3UR—21 unfurnished flatlets and guest room for able-bodied elderly people in middle income group; with sitting-room and dining-room; lift; central heating; launderette. Mid-day meal provided (optional).

"Cowlin House Rest Home", 26-28 Pembroke Road, BS8 3BB. Accommodation for 28 frail elderly people—14 single rooms, 7 double. Trained nurse in charge. Full board; central heating; lift; with sitting-room, T.V. room and dining-room.

"Dulverton House Rest Home", 11 Eaton Crescent, BS8 3EJ—Accommodation for 26 frail ambulant men and women, 16 single rooms; other residents share cubiced rooms. Trained nurse in charge. Full board; central heating; lift, with sitting-room, dining-room and T.V. room.

"Elin Cottages", Shelley Avenue, Clevedon. 4 bungalows for elderly people, suitable for married couples.

"Hanbury Court", Hanbury Road, Clifton—14 self-contained flats—bed-sitting room, one bedroom and two bedrooms with own kitchens and bath-rooms, etc. Emergency call system to "Cowlin House". Launderette; central heating.

"New Cote Rest Home", Cote House Lane, Westbury-on-Trym, BS9 3UW—accommodation for 16 frail elderly people. Trained nurse in charge. Full board; central heating; sitting-room; dining-room; television, etc.

"Rowan Court", Morley Street, Barton Hill, BS5 9LZ—48 self-contained flats with day room, launderette and warden service; central heating; lifts.

"Spinney Croft", Riverland Drive, Bishopsworth, BS13 8PF. Accommodation for 42 elderly people, 26 single rooms, 8 double, with day room, launderette, central heating and warden service.

"Stockwood"—150 self-contained flats on three sites—i.e.

Chestnut Close, Pynne Road, BS14 8QL

Linden Close, Cornish Walk, BS14 8JG

Maple Close, Stockwood Road, BS14 8HY

with day room, launderette, central heating and warden services on each.

"Stratheden", 6-8 Eaton Crescent, BS8 3EJ—27 unfurnished flatlets for able-bodied elderly people with sitting-room and dining-room; lift; central heating, launderette and warden service. Mid-day meals optional.

Day Centres

A Day Centre for housebound elderly people is run two days a week in the Day Room, Linden Close, Stockwood, covering Knowle, Whitchurch, Stockwood and Brislington. A second Centre

operates in the Day Room at Rowan Court, Barton Hill one day a week covering Barton Hill, Easton and Eastville. A third Centre operates at Worcester Court one day a week covering Clifton and Redland. The Centres at Rowan Court and Worcester Court would be open a second day a week each if more transport was available.

The elderly people are collected from their homes by mini-bus and private cars about 10.30 a.m. In addition to morning coffee and afternoon tea, mid-day meals are provided by the voluntary workers. Activities include craftwork, games, community singing and entertainment. The charge is 3s. 6d. per day.

Friendly Visiting

Volunteers help with shopping, mending, etc., for elderly people in all parts of the City.

Holidays

Convalescent holidays subsidised from voluntary funds if necessary are arranged for infirm old people.

Approximately 900 elderly people are sent to "Beverley Cottage" each year and over 1,000 able bodied elderly people are escorted on holidays in seaside hotels and guest houses during the spring and autumn. Coach outings are arranged in the spring for approximately 3,000 elderly people.

Mobile Library

Over 50 volunteers take books to elderly people in their own homes. The Association has a large stock of books including an excellent supply of large print books. A charge of 2d a week is made towards transport costs.

Miscellaneous Services

These services include assistance with clothing; the loan of blankets; wireless for the housebound; the loan of sick room equipment; comforts; advisory service and the distribution of coal; fruit, flowers, firewood, etc.

CARE OF HANDICAPPED PEOPLE (ADULTS)

Local Authority Services

Report of the Senior Medical Social Worker, Marion Moncaster

CASEWORK SERVICES

1969 was a year of consolidation rather than expansion in social work with people suffering from physical illnesses, and this was due to the sickness absence for long periods of two social workers. The sessions at St. George Health Centre were discontinued, and cases were referred instead to Central Clinic, but this service will be restored in 1970.

During the year there has been an increase in the use of the social workers knowledge of sources of financial and other help by district nurses and health visitors, chiefly for patients being nursed at home in the terminal stages of malignant illness. Assistance given by the Marie Curie Foundation, administered by the Senior Superintendent, Home Nursing Service, and the National Society for Cancer Relief, administered by the Senior Medical Social Worker, has given a great deal of comfort to the dying and relieved relations from the anxiety induced by an inability to provide sustaining but often expensive forms of nourishment or other necessities.

AFTER-CARE OF PATIENTS DISCHARGED FROM GENERAL HOSPITALS

Fifty-four patients, the majority of whom were suffering from long term or malignant illness and disability, were given sustained casework help by the Senior Medical Social Worker. Most had severe problems of adjustment to illness and increasing frailty and disability because of basic personality difficulties or, because personalities were adversely affected by illnesses such as, lupus erythematosus or accident causing brain damage. For some, adjustment was protracted because of unhappy personal and family relationships which had developed before the present conditions occurred.

Details of the conditions and ages of patients referred for after-care :

	<i>Medical conditions</i>	<i>Age range</i>
1	Attempted suicide	1 15—19
1	Ca Bronchus	3 20—29
1	Ca Colon	3 30—39
1	Ca Duodenum	7 40—44
4	Ca Lung	6 45—49
1	Ca Prostate	5 50—54
1	Ca Thyroid	12 55—59
1	Ca Uterus	9 60—64
1	Carcinomatosis	3 65—69
2	Cerebral catastrophe	2 70—74
2	Chronic bronchitis	2 75—79
1	Congenital abnormality	1 80—90
2	Disseminated sclerosis	
2	Epilepsy	
1	Gastric ulcer	
1	Head injury	
1	Hiatus hernia	
1	Lympus erythematosis	
3	Mitral stenosis	
2	Motor neurone disease	
4	Multiple injuries following road accident	
2	Myopia	
1	Narcolepsy	
1	Osteoarthritis	
1	Osteoporosis	
1	Paralysis (old encephalitis)	
3	Paralysis (old poliomyelitis)	
1	Paraplegia	
2	Pulmonary tuberculosis	
1	Reactive depression	
6	Rheumatoid arthritis	
1	Ulcerative colitis	

CHEST CLINIC SOCIAL WORK

As in previous years, two social workers were attached to this Clinic and were assisted by a social work trainee. Patients were given the opportunity to see a social worker prior to their hospital admission, and in the case of patients suffering from pulmonary tuberculosis these were followed up in Ham Green Hospital by the Local Authority social workers. Those patients not suffering from pulmonary tuberculosis were, when necessary, referred to medical social workers at Bristol hospitals, but were passed back into the care of the Chest Clinic social workers on their discharge and were followed up, as were the tuberculous patients, either at the Clinic or in their own homes.

Over the past few years there has been a decline in the number of tuberculous patients referred to social workers but a noticeable increase of patients suffering from carcinomas, bronchitis and heart conditions. Work undertaken with these patients may be divided up into two categories. Those with complex problems, needing long-term supportive casework, and those with practical problems, often financial, that can be satisfactorily resolved at the first interview. Financial problems mainly arise because many families have difficulty in adjusting to the enforced drop in income caused by illness, although earnings related sickness benefit and supplementary benefit are designed to enable people to maintain a basic standard of living. In cases of extreme hardship, approaches are made by the social workers to various charitable organisations. Housing and employment also fall mainly into the latter category, but may also be connected with more complex problems.

One of the most recurring problems is that of the vagrant, and especially the vagrant who is a heavy drinker. Accommodation is frequently required for those needing out-patient treatment and not hospitalization, but few hostels are prepared to admit them, or the individuals concerned are unable to conform to the social demands made on them.

Below is a classified table of patients seen by social workers from January, 1969 to December, 1969:—

JANUARY 1969—DECEMBER 1969

<i>Casework—new referrals</i>				<i>Minor Services—new referrals</i>			
Tuberculosis	...	...	38	Tuberculosis	...	...	63
Bronchitis	...	...	14	Bronchitis	...	...	60
Carcinoma	...	...	5	Carcinoma	...	...	40
Other (*)	...	...	15	Other (*)	...	...	123
<i>Casework—follow up from 1968</i>				<i>Minor Services—follow up from 1968</i>			
Tuberculosis	...	...	58	Tuberculosis	...	...	8
Bronchitis	...	...	31	Bronchitis	...	...	8
Carcinoma	...	...	1	Carcinoma	...	...	—
Other (*)	...	...	21	Other (*)	...	...	14

(*) Emphysema, pneumoconiosis, asthma, pneumonia, bronchiectasis, pleurisy, cor pulmonale, angina and other heart conditions.

Total number of patients seen ... 499

While casework has been remedial in some cases and supportive in others, many have had their social problems relieved by the help of voluntary organisations. Chief and most generous among these has been the Bristol Tuberculosis Voluntary Care Committee, whose hon. secretary, Miss Lobb, is regularly available at Central Clinic, and assistance is given without delay. The Committee's programme of caravan holidays has been most beneficial to patients and their families, as has been the provision of television sets for the lonely and housebound, and a large number of families known to the Chest Clinic and to other sections of the Department received a gift of a Christmas voucher for food which was warmly received.

Other organisations too numerous to mention individually have given service and other forms of assistance with equal goodwill. We are grateful for their continued help.

OCCUPATIONAL HEALTH

The social worker dealt with 82 cases during the year; 45 new ones and 37 carried forward from previous years, and the senior medical social worker with 8 new ones and 5 carried forward from the previous year, whose problems were more complex. Three of the cases were referred after retirement, and in one case it was the widow who asked for help. There were 27 other families known from previous years which in the normal way would have been followed up by the social worker, but this work had to be left on account of more pressing relief duties in the Chest Clinic. These people knew that they could contact the social worker if they wished, and the fact of their not having done so cannot in all cases be assumed to mean that there was no need, as many are reluctant to "be a trouble".

Given below are tables showing details of referrals, types of problems and the employing departments concerned in new cases:—

Referrals							<i>S.W.</i>	<i>S.M.S.W.</i>	<i>Total</i>
1. Medical staff in Occupational Health Department	...	...	...	...	...	...	18	4	
2. Employer—comprising various grades of supervisory categories as follows:—									
4 Section heads							—	2	
1 Supervisor							6	—	
1 Inspector							8	—	
3. Self via card	...	...	...	...	...	...	5	1	
4. Other social worker	...	...	...	...	...	...	2	—	
5. D.R.O.	...	...	...	...	...	...	1	—	
6. Relative	...	...	...	...	...	...	4	1	
7. Other employee	...	...	...	...	...	...	1	—	
8. City Treasurer's Department	...	...	...	...	...	...	45	8	53

	<i>S.W.</i>	<i>S.M.S.W.</i>	<i>Total</i>
Type of Problem			
1. Failure to function effectively at work because of personality or psychological difficulties	1	4	
2. Adjustment to early and inevitable retirement	9	—	
3. Adjustment to disability while still working	4	—	
4. Resettlement in work outside the Corporation	7	—	
5. Resettlement in work inside the Corporation	2	1	
6. Financial	3	—	
7. Need for support to one partner of married couple during sickness or after the decease of the other	—	3	
8. Marital disharmony	4	—	
9. Housing and accommodation	5	—	
10. Personal	5	—	
11. Support to employee and family when former off sick	2	—	
12. Employee struggling to keep on at work while caring for sick relative	3	—	
	<hr/> 45	<hr/> 8	<hr/> 53
Departments			
City Engineers, now inclusive of former Transport and Cleansing Department	18	—	
City Planning	—	1	
City Treasurer's Department	1	—	
Education	8	3	
Health	7	3	
Housing	8	1	
Libraries	1	—	
P.B.A.	2	—	
	<hr/> 45	<hr/> 8	<hr/> 53

The referrals from medical staff were mainly in connection with difficulties in relation to effective functioning at work of personnel with psychological or personal problems, with adjustment to early retirement and also to bereavement. In interviewing those who have to retire early on health grounds and whose prospects of finding other lighter work are poor, if not hopeless, the social workers are aware of the tragedy involved for the person facing the loss of a life's work, and are frequently impressed by the loyalty of the majority of members of the Corporation's staff, for many of these have been struggling to keep on at work much longer than they were fit to do, often from a sense of duty. Most of these required casework help over a period of time. Knowledge of pension and gratuity entitlement and the individual's position with regard to extensions of sick pay play an important part in acceptance of early retirement, and we would like to record here the helpful co-operation of the staff responsible for the administration of the superannuation scheme in the City Treasurer's Department and other departments, and also the staff officers and wages clerks who supply some of this information so readily.

Numbers referred by employers remain small, but the percentage increase is high over 1968, and shows that those in a supervisory capacity are beginning to use the service. In two cases the work with the employees was made more effective through the active co-operation of the supervisors.

No cases arose from sick returns, as this part of the work had to be left because the social worker undertook relief work in the Chest Clinic.

Help in cases carried forward from previous years varied in intensity from casework to the giving of some ameliorative assistance such as a Christmas voucher from the Voluntary Care Committee to those in financial need.

Early in the year a start was made with a scheme formerly envisaged but not implemented. Every employee was given a card publicising the service in his or her wage packet or with a salary slip, and as a result of this 8 people approached the social worker directly. This is a very small number, but the resulting interviews gave some indication of the sorts of problems with which employees feel they need help. An analysis of these is given below :—

Care of disabled wife	2
Accommodation	3
External environmental factors affecting work performance	1
Anxieties about loss of ability to perform work satisfactorily	2

All the help given, whatever its degree, has been much appreciated, partly because "the Corporation" as an employer seems an impersonal body to many people, and to be assisted in a personal way through the service has been beneficial as it implies a recognition of their value as individual members of the organisation.

Early in the year the social worker gave a talk on the work of the Occupational Health Service to the Retired Members' Section of the Transport and General Workers' Union, which on this occasion comprised an audience of about 80 people. A useful side effect of this talk was that the social worker became more knowledgeable about the social activities arranged by this organisation and could pass on some first hand information to retiring employees who were members of the Union.

SPECIAL TREATMENT CLINIC SOCIAL WORK

Mrs. J. Merchant

Mrs. C. M. Burton

The number of new patients seen at the Clinic was the highest on record. This inevitably meant that the demands on the social workers were intensified.

In the 1968 report there were indications that a rise may occur in the number of cases of early syphilis amongst homosexual males. This did not materialise. It is probable that contact tracing played a significant part in preventing a greater incidence.

Increased resistance of some of the organisms which cause venereal disease has, in many cases, resulted in prolongation of the time required for treatment. This has involved more default work. Some patients prescribed daily injections had to be found and persuaded to attend for each injection. Resistant organisms also made it more difficult to control the spread of infection.

The higher incidence of gonorrhoea necessitated extra contact tracing and brought more people into touch with the social workers. In addition considerable time had to be given to the needs of patients who were not suffering from specific infections. Problems were usually those of feeling, although practical help was also sought.

A second social worker joined the clinic staff in September. An expansion of the casework was attempted with the women and girls who were attending the clinic.

Some of these were already attached to a social work agency and it was necessary in these cases to establish a good liaison with the social worker concerned. Other patients had very specific problems and it was necessary to refer them to a more appropriate casework service. The majority of patients were seen for one interview only. This was due to their living a long way from the area, or not needing, or wanting, any further help or advice. Some of these however did return and here it was possible to work in a little more depth with them.

For example, one girl was seen over a period of three months. She was using soft drugs daily and had attempted suicide three days before being interviewed at the clinic. She had a very difficult home situation, lacking both attention and direction from her parents. Her mother had a serious problem of alcohol dependency. During the months in which she was seen weekly by the social worker, she began to have more realistic ideas about herself and her relationships with other people. She came to realise the consequences of her own actions and gradually she became more stable. Her drug abuse declined as her own situation became more tolerable to her.

The expansion, locally and nationally, of the programme for propaganda and health education in venereal and other sexually transmitted diseases, appears to have contributed to a greater awareness and more frank discussion of the subject. Patients seemed less reluctant to attend a clinic.

The social workers assisted the campaign with talks and discussions with medical and nursing students, youth clubs, schools and other organisations. Co-operation was given to Barbara Buchanan for a series of articles which were printed in the Bristol Evening Post.

A closer liaison was established with the health visitors who work in the counties on the periphery of the City. Support was given to a successful attempt to form a National Society for Social Workers in Clinics for Venereal Disease. The objects of the Society are:— to improve contact-tracing arrangements between various authorities; to provide some facilities for study of relevant subjects and ultimately to establish an introductory course for new workers.

An ever-widening range of people are contracting sexually transmitted disease, and all aspects of the problem require attention. There is, however, a hard core of unstable people who often have multiple social problems. It is here that the main reservoir of infection is maintained; time spent on preventive work amongst these people could be well worthwhile.

WELFARE SERVICES

R. C. Travill, LL.B., D.P.A.

(Principal Welfare Services Officer)

It gives me great pleasure to give details of the main services provided under the Welfare Services Section of the Department for the second year in which the Social Services Committee have been responsible for these services. In some ways these may appear as a repetition of matters mentioned last year yet knowing that some members of Council regard the annual report of the M.O.H. & S.S. as a book of reference it is felt that no harm is done by repeating many of the main headings and summaries of services provided.

(a) Residential Accommodation

This continues to be one of the main fields of the Committee's work for the provision of care and attention for the elderly is a task for which there is likely to be a continuing and increasing demand. There is an ageing population and many of these elderly people are without adequate family support. Advances in medicine enable people to live longer and admission to hospital in old age is tending to be more and more admission for treatment and not long-term care. These facts add to the problems of providing residential accommodation for the greater majority of residents are now particularly frail and need a great deal of attention from staff. The new purpose built homes for elderly people are able to provide this care and attention in conducive surroundings for in these new homes most residents are able to have their own single bedroom although double bedrooms are of course available for married couples or friends wishing to share.

During 1969 further progress was made in implementing the policy inaugurated by the former Welfare Services Committee of closing the former institution at 100 Fishponds Road. At December 1968 there were 125 residents still remaining in that home; by December 1969 this figure was down to 50 and with the opening of the Southmead home in 1970 the final closure of 100 Fishponds Road should be achieved.

The year 1969 also included the opening of two new homes, those at Bedminster (56 beds) and St. George (59 beds). The Southmead home previously mentioned was commenced and plans taken to tender stage for homes at Barton Hill and Westbury. By the time of publication of this report these two homes will be under construction and planning well in hand for the next new home to be provided at St. Paul's.

At the end of 1969 homes provided by the Committee were as follows :—

100 Fishponds Road	50 beds
Meadowsweet (Fishponds)	192 „
119 Pembroke Road (Clifton)	20 „
5 All Saints Road (Clifton)	17 „
9 Priory Road (Clifton)	20 „
“Rossholme” (Redland Road)	22 „
“St. Peter's” (Bishopthorpe Road.)	45 „
“Gleeson House” (Fishponds)	45 „
“Hollybrook” (Hartcliffe)	54 „
“Hazelbrook” (Henbury)	52 „
“Rushlands” (Lawrence Weston)	54 „
“Broomhill” (Brislington)	53 „
“Elm Hays” (Highridge)	59 „
“Woodcroft (Inns Court)	60 „
“Bow Mead” (Stockwood)	56 „
“Westleigh” (St. George)	59 „
“Hayleigh” (Bedminster)	56 „
	<hr/>
	914 „

In addition to these however the Committee were financially responsible for a further 148 aged or disabled persons in homes provided by other local authorities or voluntary bodies.

Residents in the homes contribute towards the cost of their maintenance according to their means, the basis of assessment being set out in the Ministry of Social Security Act 1966. The full

standard charge per resident is now £13 3s. 8d. per week and the minimum payment is £4 per week. Approximately 35% of the residents are contributing more than this minimum charge. In determining a person's ability to pay it is necessary to ensure that all residents have at least £1 per week for personal expenses, whilst certain residents may be able to retain up to a further £1 per week or even a further £2 per week where disablement pensions are involved.

It has become increasingly apparent over the years that persons admitted to homes are not only more elderly but generally speaking much more infirm and this additional infirmity necessitates not only more generous staffing ratios but also careful regard to the suitability of some of the older establishments. During 1969 the Social Services Committee considered Meadowsweet particularly in this last respect and have decided that by splitting it into 4 unit homes, each individually staffed, it would be possible to give an even greater depth of care to its residents.

(b) Elderly Persons' Dwellings

Although these are not provided directly by the Social Services Committee they play such an important part in the provision of services for the elderly in the City that no report would be complete without reference to these dwellings. Many elderly people who formerly would have needed to apply for admission to a residential home are, by elderly persons' dwellings, enabled to continue to live in their own home and after all this is where most of them wish to be. The Social Services Committee co-operate both with the Housing Committee and the voluntary organisations in this field of work. With Housing Committee developments they share in both design (particularly as to welfare amenities such as common room, call system etc.) and the selection of tenants. The Social Services Committee also appoint wardens who in effect act as a paid friendly neighbour at the larger group of Housing Committee E.P.D.'s. With regard to such dwellings provided by voluntary organisations the Social Services Committee make welfare grants to enable these organisations both to incorporate particular facilities needed by the elderly and to appoint wardens.

At the end of 1969 there were over 700 such dwellings provided by the Housing Committee and over 300 provided by voluntary organisations with a number of other schemes either under construction or planned by both the Local Authority and voluntary organisations.

(c) Temporary Accommodation

In the execution of their duty to provide temporary accommodation for persons who are homeless in unforeseen circumstances or in such other circumstances as may be decided, the Committee in 1969 proceeded with the conversion of properties in Mina Road to replace the facility previously made at 100 Fishponds Road.

Temporary accommodation of this nature must be temporary in the strict sense of that word and is often a last resort. The Committee are aware of the preventive work undertaken by both the Children's and Housing Committees to encourage families to avoid eviction but many of the problems encountered however arise from domestic difficulties rather than actual eviction.

(d) Services for the Handicapped

(i) Physically Handicapped

The Committee have continued to assist persons living in their own homes by the provision of such adaptations as hand rails, ramps and other aids and this is an important contribution to individual independence of those with restricted mobility.

A number of voluntary organisations working in the field of handicapped are provided with transport and other assistance by the Committee.

Severely disabled drivers can be assisted by the issue of car badges which although not conferring any legal rights do serve as a ready means of identification. Although not in issue in 1969, steps were negotiated in that year with a view to the issue of second badges entitling the reservation of a particular parking meter or other parking space to the very severely handicapped in employment.

The most noteworthy of the Committee's activities for the physically handicapped is of course the Pastime Centre at Lockleaze which continues to be attended by about 150 persons daily for varying numbers of days per week. Although primarily for recreational purposes, handicrafts and social activities are available at this centre as are bathing, launderette and hairdressing facilities. All of these do much to boost the morale of these physically handicapped people.

(ii) Deaf and Hard of Hearing

For this particularly isolated group the Committee continue to use the Bristol Institute for the Deaf as their agents and have continued to second three of their social work staff to work from

the Institute premises amongst deaf and hard of hearing. At the end of 1969 there were 425 deaf and 324 hard of hearing persons registered.

(iii) Blind and Partially Sighted

At the end of 1969, 1,028 blind persons and 197 partially-sighted persons were registered in the City. One of the most noteworthy features over recent years has been the increasing age of this group of handicapped and of the above figures 779 were over the age of 65 years. During 1969, 115 persons were registered as blind and 38 as partially sighted. Of these 115 were over the age of 65 years.

Services for the blind and partially sighted are provided by the home teachers for the blind who offer such services as handicrafts, teaching of Braille and Moon, organising holidays, outings, arrangements for talking books and other aids to independence. There are some 160 persons who suffer the dual handicap of both deafness and lack of sight and for this group special facilities are available. Free bus travel is provided for registered blind able to make use of this facility.

(iv) Sheltered Employment

Physically Handicapped

The Committee assist by grant the Home Workers Scheme of the Bristol Council for the Disabled and also the Spastics Association Work Centre at Dovercourt Road. The Bristol Council for the Disabled also operate a work centre in the grounds of the Pastime Centre at Lockleaze in a building provided for their use by the Committee.

Blind and Partially Sighted Persons

Sheltered workshop facilities are provided for blind men and women unable to work in open industry by the Bristol Royal School and Workshops for the Blind as agents for the Committee. It has also been possible to integrate within this workshop a small number of physically handicapped sighted persons. Various trades are provided, both of the traditional type e.g. mat and basket making, as well as light engineering and the recently introduced shrink wrapping section.

For those blind persons capable of employment on their own account the voluntary body also operate a Home Workers Scheme on behalf of the Committee.

(e) Domiciliary Services for Elderly People

(i) Clubs for Elderly People

Although not directly provided by the Committee the clubs for elderly people provided by the Bristol Association for Elderly People supply a most useful service for the elderly. These clubs provide excellent opportunities for elderly people to be socially active at very little cost. The clubs are open daily apart from Sundays from about 2 p.m.—9.30 p.m. and it is the members themselves who control their day to day activity through their own officers and committees.

The officers of the Department continue to play an extensive part in the affairs of the Association and are as anxious to see this field of the work progress as those aspects of social work which are directly provided by the Committee.

The Clubs are situated at :—

- Club for Elderly People, Collin Street, Avonmouth
- Club for Elderly People, 112 Avonvale Road, Redfield
- Club for Elderly People, Denmark Place, Gloucester Road, Bishopston
- Club for Elderly People, Wick Road, Brislington (4)
- Princess Elizabeth Club, Myrtle Street, Bedminster (3)
- Club for Elderly People, 100 Fishponds Road, Eastville (5)
- Club for Elderly People, Beechwood Road, Fishponds
- Club for Elderly People, Machin Road, Henbury
- Club for Elderly People, Redcatch Road, Knowle (4)
- Club for Elderly People, Romney Avenue, Lockleaze (7)
- Club for Elderly People, Burlington Road, Redland (6)
- Club for Elderly People, Recreation Ground, Sea Mills (9)
- Club for Elderly People, Greystoke Avenue, Southmead
- Club for Elderly People, The Tithe Barn, High Street, Shirehampton
- Club for Elderly People, Summerhill Road, St. George
- Club for Elderly People, Craydon Walk, Stockwood (4)
- Club for Elderly People, Broadoaks Road, Withywood

(ii) Visiting of lonely people

1969 saw this service come under the direct control of the Committee in that the Liaison Officer Service formerly supported by grant to the Bristol Old Peoples Welfare Incorporated, was inte-

grated within the Department. This has enabled increased co-operation between statutory and voluntary services and the value of the volunteer cannot be too highly regarded for it would be impossible for all of this type of work to be performed by paid staff. The Liaison Officer in fact acts as a 'go between' between those persons needing a service and those wishing to offer one.

(iii) Meals Service

The value of this service cannot be too highly stressed for it at least ensures for a great number of people the high quality cooked meal which they probably would not be able to provide for themselves. Although the greater part of the city is now covered by the Committee's own staff for delivery purposes, co-operation continues with Bristol Old Peoples Welfare Incorporated and the W.R.V.S. for certain areas of the city. Most meals provided now are of the Top Tray frozen food variety supplied from the Committee's own kitchen at Bedminster and the Avonmouth kitchen of the Public Works Committee, although a number of traditional meals are still provided from industrial canteens. This dual standard of meals served will cease when the additional kitchen at Barton Hill is available in 1971. During 1969, 312,293 meals were distributed and at the end of that year 1,477 persons were in receipt of meals. The meals service is available on 5 days per week and the charge now made to recipients is 2/- per meal. In addition the Luncheon Club provided at the University Settlement, Barton Hill is financially assisted by the Committee.

(f) Other Services

Noteworthy but by no means as spectacular, are other important services provided in the welfare field, such as care of moveable property of a person admitted to a home or hospital when no other arrangements are possible and the burial or cremation of persons dying in the city where no other arrangements are being made.

The Committee also are required to register private and voluntary homes for the elderly and disabled and in this way some safeguards are ensured for those elderly people wishing to make private arrangements for their accommodation.

OCCUPATIONAL HEALTH SERVICE

by E. P. Hamblett, M.D., D.P.H., D.C.H., D.T.M. & H.,
(Departmental Medical Officer)

INTRODUCTION

Dr. J. F. Skone acted as Senior Medical Officer (Occupational Health) until Dr. J. W. Markham resumed duty on re-appointment on 25th August 1969.

The establishment of the section consisted of a senior medical officer and the equivalent of one full-time departmental medical officer (in sessions spent entirely on pre-employment medical examinations), a social worker, a secretary, a clerk, and an additional clerk (from 29th September 1969). General advice on occupational health matters to the equivalent of one consultant session each week is given by the Chief Medical Officer to an industrial corporation, who is also a lecturer in occupational medicine in the University of Bristol. The advice of the Social Services Committee's Consultant in Social Psychiatry is also available. Professional, technical and other help was given from time to time from this and other departments of the Corporation.

From 1st April 1969 the Occupational Health Service has assumed medical responsibilities for employees of the Bristol Waterworks Company.

1. Medical Examinations

(a) *Pre-employment routine medical examinations*

From 1st July—31st December 1969 there were 2,022 routine pre-employment medical examinations carried out. This total includes 56 from the Bristol Waterworks Company (See Table 1). Figures for the period 1st January—30th June 1969 are to be found in the 1968 Annual Report.

Table 1

PRE-EMPLOYMENT AND PERIODIC MEDICAL EXAMINATIONS (1st July—31st December 1969)

Airport	...	...	...	11
Baths	...	...	...	6
Bristol Pilotage	...	...	...	4
Childrens	...	...	...	85
City Architect	...	...	...	13
City Engineer	...	...	...	76
City Treasury	..	...	...	15
City Valuer	...	...	...	3
Constabulary	...	...	...	42
Crematorium	...	...	...	2
Education	...	...	...	817
Establishment	...	...	...	50
Fire Brigade	...	...	...	10
Health and Social Services	...	...	...	206
Housing	...	...	...	15
Libraries	...	...	...	4
Museum and Art Gallery	...	...	...	5
Miscellaneous Authorities	...	...	...	24
Port of Bristol	...	...	...	65
Probation	...	...	...	1
Public Relations	...	...	...	5
S.W. Examination Board	...	...	...	2
Town Clerk	...	...	...	28
Transport and Cleansing	...	...	...	18
Weights and Measures	...	...	...	1
Welfare Services	...	...	...	87
School Meals	...	...	...	371
Bristol Waterworks Co.	...	...	...	56
Total	...	...	...	2,022

(b) *Special Examinations*

From 1st July—31st December 1969, 114 employees were seen with health problems related to their work. This total included 9 employees of the Bristol Waterworks Company (see Table 2). Figures for the period 1st January—30th June 1969 are to be found in the 1968 Annual Report.

Table 2—*New cases seen at Special Examinations (1st July—31st December 1969)*

DEPARTMENT	Code Number	Advice only	Personal Help	Retired on Health Grounds	New Job in B.C.	New Job elsewhere	Not yet known	TOTAL
Baths	2	1	1	—	—	—	—	2
Childrens	4	2	—	—	—	—	—	2
City Engineer	6	4	4	8	1	—	—	17
Museum and Art Gallery	7	—	1	1	—	—	—	2
City Treasury	9	3	1	—	—	—	—	4
City Valuers	10	1	1	—	—	—	—	2
Education (non teaching)	11	7	5	—	—	—	—	12
Education (teaching)	12	3	6	—	—	—	—	9
Health and S.S. (General)	15	—	2	—	—	—	—	2
Fire Brigade	16	2	9	1	—	—	—	12
Health and S.S. (Ambulance)	17	3	2	—	—	—	—	5
Housing	18	2	—	—	—	—	—	2
Libraries	19	—	—	1	—	—	—	1
Port	21	1	6	4	1	—	—	12
Town Clerk	25	1	—	—	—	—	—	1
Transport	26	—	5	3	1	—	—	9
Welfare Services	28	7	3	1	—	—	—	11
Bristol Waterworks Co.*	29	4	2	1	**2	—	—	9
TOTAL		41	48	20	5	—	—	114

(* From 1st April 1969—31st December 1969). (** New jobs in Bristol Waterworks Company).

(c) *Claims against the Corporation where medical examination has been required*

The Occupational Health Service's function in these claims brought against the Corporation in the year has been to arrange medical examinations by a suitable consultant and to pass the reports following such examinations on to the Town Clerk. Thirty such examinations have been arranged during the year.

2. **Screening Examinations**

(a) *Mammography*

Up to the end of 1969 a cumulative total of 1,044 women had submitted to mammography that is offered to all female employees of the Corporation of 40 years and over.

At the Central Health Clinic mammography was started in 1968. Of the total of 1,044 mammograms up to the end of 1969 over 80% were of women of 45 years and over. In 86 of these abnormalities were found but only 45 were of such a nature as to require further examination, and investigation. Benign tumours were discovered in 4 cases following clinical examination, and biopsy or exploratory operation. In all 16 biopsies were done. One malignant tumour was discovered as an immediate result of mammography.

However, subsequent to mammograms which had showed no abnormality 3 other malignant breast tumours were discovered—after periods of 6 months or more.

As it is likely that in two out of the three the condition might have been discovered earlier if clinical examination had been carried out at or before mammography, clinical examination of the breasts is now being carried out in every case before mammography is done.

The overall discovered malignancy rate in the 1,044 women who had a mammogram is 3·8/1,000.

(b) *Cervical Cytology*

During the period 1st July—31st December 1969 this service has continued to be open to female Corporation employees and the following table gives a summary of the examinations undertaken and the results obtained.

Table 3. Summary of examinations of cervical cytology (1st July—31st December 1969)

(a) <i>Age Groups</i>			
Under 25 years	...	...	4
25—34 years	...	...	32
35—44 years	...	...	48
45—54 years	...	...	65
55—64 years	...	...	22
65 years and over	...	...	6
Total			177
(b) <i>Marital Status</i>			
Married	...	...	152
Single	...	...	25
Total			177
(c) <i>Parity</i>			
0	...	...	58
1	...	...	26
2	...	...	51
3	...	...	24
4	...	...	6
5	...	...	8
6 and more	...	...	4
Total			177
(d) <i>Significant abnormalities discovered</i>			
None			

(c) *Multiple Screening*

No extension of multiple screening has been undertaken since a small trial was carried out in the first half of 1969.

At the end of the report period the whole question of multiple screening, the population to be covered, the type of screening examinations to be undertaken and the method of follow-up to be employed was all under active consideration. It is likely that if multiple screening is to be embarked upon it will be as a research rather than as a service project.

3. **First Aid Training**

The Occupational Health section has had the services of the Training Officer (Health Education) on a part-time basis in connection with first aid training.

From the 1st July—31st December 1969 451 members of the Corporation had received instruction in artificial respiration and/or first aid. There were 3 first aid courses and of the 45 employees who took St. John Ambulance or British Red Cross examinations 44 passed successfully.

Instruction and practical demonstration has continued to emphasise the importance of mouth-to-mouth artificial respiration, and external cardiac massage. The first aid figures from 1st January—30th June 1969 are to be found in the annual report 1968.

4. **Bristol Waterworks Company**

The Occupational Health section took over medical responsibility for the Bristol Waterworks Company from 1st April 1969 and in that period 56 routine pre-employment medical examinations and 9 special examination where there was a health problem or relationship to work, was carried out.

Before employment and at regular periods thereafter all employees of the Bristol Waterworks Company likely to come into contact with the public water supply, especially after treatment of the water, have blood and stool examinations.

The blood examinations are serological ones (Widal reactions) for the organisms of the enteric group (typhoid and paratyphoid). Three consecutive stool examinations—involving bacteriological culture for pathogenic intestinal organisms are carried out.

In the period under review no abnormal results were obtained.

ENVIRONMENTAL HEALTH SERVICES

G. J. Creech, M.B.E., C.St.J., F.R.S.H., M.A.P.H.I.,

(Chief Public Health Inspector)

REPORT TO THE MEDICAL OFFICER OF HEALTH AND SOCIAL SERVICES

I have pleasure in submitting my sixth Annual Report upon the work of the Environmental Services Division, this report being upon the work carried out during 1969.

I have been able to report in previous years a significant increase in complaints and in the number of visits made by the Inspectorate. This year the complaints have again risen to a record total of 15,073. Of these, 10,069 were complaints relating to public health and housing matters, 2,876 related to rats, and 2,118 to mice. The total number of visits made by Inspectors increased by roughly 2,000 to 86,453, but visits for other purposes dropped slightly, so that the overall total was 137,388, slightly less than that for the previous year.

During the year attention was given to the enforcement of the Food Hygiene (Market Stalls and Delivery Vehicles) Regulations, 1966 and our efforts in this direction resulted in 38 prosecutions involving 98 separate counts, and fines and costs amounted to £363.0.0 in this sphere of our work alone.

The total number of all cases taken to Court was 79 and an overall total of £836.9.0 in fines and costs was imposed by the Courts.

Once again I wish to comment upon the loyalty and goodwill of all members of the staff, both technical and clerical, and to emphasise that it is only by their devotion to duty and loyal team work that such a favourable report upon the year's work as is contained in the following pages can be given.

GENERAL ENVIRONMENTAL HEALTH WORK

SUBMISSION OF PLANS

During 1969, 592 plans were forwarded to this Division by the City Engineer and Planning Officer for perusal by district and specialist public health inspectors. This close liaison between the two departments has again proved valuable not only to officers but perhaps most of all to the person or firm concerned with the proposed works or development.

WATER SUPPLY

Once again the water supply of the City which is supplied by the Bristol Waterworks Company, has been found satisfactory in both quality and quantity and no instance of contamination has been found which necessitated action by the Department.

The whole of the city's population is supplied by water mains direct to houses and there are, therefore, no standpipes in use.

The fluoride content of the water supplied within the Bristol area varies with the source of supply and remains the same as last year :

Barrow	0.04—0.20 p.p.m.
Chelvey	0.05—0.12 p.p.m.
Stowey	0.08—0.38 p.p.m.
Littleton	0.05—0.15 p.p.m.

SEWERAGE AND SEWAGE DISPOSAL

The arrangements for sewerage and sewage disposal have once again proved adequate. Work has continued throughout the year on the trunk sewer system to intercept sewage before discharge to the River Avon and the Ashton Avenue pumping station is due for completion next year. The sludge disposal vessel, M.V. Glen Avon, was officially accepted on the 13th September but was unable to go into service as delays were experienced in the construction of the special quay at Shirehampton. It is expected that the vessel will commence full service early next year.

There has been a slight reduction in the number of premises in the City not drained to sewers, the number at the end of the year being 325.

HOSTELS (Common Lodging Houses)

The three hostels, two of which are run by the Salvation Army and the remaining one by the Church Army, have been found to be satisfactory. Once again the officers in charge have co-operated in permitting the use of the premises for practical demonstrations to students.

THE PET ANIMALS ACT, 1951

All pet shops in the city were inspected prior to licensing by the Corporation's Veterinary Officer and the Deputy Chief Public Health Inspector, subsequent routine inspections being carried out by the district inspectors. A total of 124 inspections were made of 29 premises.

THE ANIMAL BOARDING ESTABLISHMENTS ACT, 1963

Three licences have been renewed after inspection by the Veterinary Officer.

THE RIDING ESTABLISHMENTS ACT, 1964

There are two riding establishments in the city and both have been inspected by the Veterinary Officer.

THE THEATRES ACT, 1968

Applications for licences under the Theatres Act, 1968 were passed to the Environmental Services Division for observation before a report is submitted to the Public Safety Committee. This involved public health inspectors in a total of 150 visits to 112 premises.

FROM THE DEPARTMENT'S RECORDS

In spite of the efforts of the many persons engaged in social work one comes across cases from time to time where all offers of assistance are rejected and the resultant public health problems become very difficult to control. Such a case occurred during the year in a road of well maintained and predominantly owner/occupied houses, although the house concerned was council-owned. The sole occupier, an aged woman, was deaf, dirty and unco-operative in the extreme. She was, however, physically capable of going to the local shops, to the chagrin of the shopkeepers, and was not averse to resorting to physical action against persons to whom she took a dislike.

In her home she was inseparable from her cats, which usually numbered at least nine, resulting in conditions matched only by the habits of the old lady. Over a period of years numerous visits were paid to the property by successive district inspectors who managed to keep conditions just under control. Access to the property could be gained and a fairly cordial relationship could be maintained provided no coercive action was taken, but as soon as some constructive suggestions to improve conditions were made her attitude towards the inspector changed drastically.

Conditions deteriorated and compulsory removal in accordance with Section 47 of the National Assistance Act, 1948 was considered but because of the woman's ability to shop and prepare her own food was not pursued. However, action was taken under Section 83 of the Public Health Act, 1936, one lorry load of extremely offensive material saturated with cats' urine and excreta was removed and extensive disinfection and disinfestation measures taken. Some progress was made in alleviating the offensive conditions but unfortunately the tenant became even more unco-operative until eventually entry to the premises was refused. A warrant to enter the premises was issued by the Magistrates Court under Section 287 of the Public Health Act, 1936 and access was gained without force by climbing into the back garden and entering via the cellar of the house. The element of surprise enabled the inspector to take charge of the arsenal of defensive weapons consisting of a hammer, garden shears, broom handles and walking sticks. He was however greeted with a hail of abusive language and a blow to the side of the head.

The premises were again found to be dilapidated and quite offensive mainly because of cats' urine and excreta which was slowly raising the floor level of the living room. The cats were in a severe state of malnutrition but appeared to be reconciled to their lot. Shortly after this episode there was a marked deterioration in her mental state and she was removed by the Mental Health Officer. During the subsequent clearing operation a dead and partly decomposed cat was discovered in the commode. This and several lorry loads of offensive material were removed and extensive disinfection carried out.

NOISE

This year has produced 192 complaints of noise, and has resulted in 2,232 visits of investigation being made by public health inspectors. Both these figures show an increase over last year's level and indicate the increasing awareness of noise and the unwillingness of the public to tolerate it.

The largest single cause of complaint arose from the use of pneumatic drills on road works and accounted for 20% of the complaints dealt with. This is a difficult problem as the noise is generated from three sources : compressed air exhaust from the drill, the impact noise of the drill against the road surface and the noise from the compressor motor. In most of the cases investigated it was found that no reduction in sound pressure levels could be achieved as silencers and muffles were already provided to the drills. However, on certain sites a reduction in noise levels was obtained by the resiting of the compressor units to screened areas and by the erection of temporary screens around the operator. On certain large building sites in the vicinity of the City centre, operations which produced considerable noise problems which were normally carried out during normal working hours have been successfully overcome by switching the operating time to evenings. This has avoided the problem of nuisance to office workers but has been possible only in developments in areas where there have been no residential properties.

An unusual noise nuisance did occur in the City which precipitated a large number of complaints, including a petition containing 49 signatures, letters also being sent to the local Member of Parliament and the Noise Abatement Society. Banging noises occurred during the night and it was established upon investigation that the noise was emanating from drum laden vehicles parked on open land within earshot of a local authority multi-storey block of flats. The empty drums, of which there were approximately 200 loaded on each trailer and as many as five trailers were present on the site at any one time, contracted as the temperature fell during the night, resulting in a loud noise resembling that produced by beating an empty drum with a piece of wood. Night observations were carried out by the Area Public Health Inspector who was satisfied that the noise was such as to cause acute disturbance to flat dwellers and could be considered, therefore, to be a statutory noise nuisance. If legal proceedings in the case had been necessary difficulties would have been experienced as it would have been impossible to pinpoint the lorry which contained the particular drum or drums which were causing nuisance at any one time. Fortunately the land upon which the vehicles were parked was owned by the Corporation and steps were taken to prohibit the use of this space for parking. A new, suitably isolated parking site was found elsewhere in the City where bangs in the night could not cause nuisance.

Irrespective of the high number of complaints received this year it has only been necessary to serve one statutory notice. In this case a firm of timber packing case manufacturers moved into a new purpose built factory on the edge of an industrial estate in reasonably close proximity to a number of dwelling houses. Within a few weeks of the factory opening, complaints were made to the Department regarding excessive noise. Upon investigation this was found to emanate from a sawdust collection plant. This consisted of draw off ducts to convey sawdust from the work benches to a large cyclone which drew the wood waste into one central collecting point, before discharge to a purpose built lorry used to transport the material away from the site. The officers took a series of sound pressure level measurements around the site, were satisfied of the existence of a noise nuisance and a notice was duly served. In response, silencers were fitted which considerably reduced the high frequency noise levels but the noise of wood chips hitting the sides of the metal cyclone still caused a nuisance. Further remedial work of cladding the whole of the cyclone has had to be undertaken and investigations will continue into the New Year.

HEALTH EDUCATION AND TECHNICAL TRAINING

Once again members of the Environmental Services Division have been very active in this work. This year, particularly the latter part of the year, has seen a welcome increase in talks given to food handlers. Since the inception of the Hotel and Catering Industry Training Board catering firms have become more training conscious with the result that more requests for food hygiene instruction have been received by the Department. This is indicative of somewhat of a change of heart on the part of the food trade but the problem of involving the smaller firm remains. The list of lectures and demonstrations provided by the Division is appended below.

TRAINEE PUBLIC HEALTH INSPECTORS

A total of nine trainee public health inspectors were in training at the beginning of the year. Three passed the final examination and were appointed to the qualified staff and six passed the intermediate examination. Each of the three new trainees who were offered appointments subsequently changed his or her mind either in favour of an authority near the student's home town or in favour of authorities willing to second students to the degree course at the University of Aston. However, one first year trainee was appointed and the strength at the end of the year was seven trainees.

In May the whole of the final year of the Public Health Inspectors' Diploma Course at the Matthew Boulton Technical College, Birmingham visited the City for four days. A programme was arranged for them which included a visit to the Port Health Office, various industrial visits and a discussion session with the various senior inspectors. This was a new venture in the field of student training which proved most successful and it is felt one that could be used more often with great benefit to the student.

LECTURES AND/OR DEMONSTRATIONS

University of Bristol

Department of Public Health

Department of Veterinary Medicine

Extra Mural Department

University of Aston in Birmingham

Bristol Polytechnic

Faculty of Economics and Social Sciences

Faculty of Technology

Department of Health and Social Services

Bristol Technical College

United Bristol Hospitals }

Frenchay General Hospital }

Stoke Park Hospital }

Purdown Hospital }

School Meals Training Centre

The following schools were visited :—

Ashton Park Comprehensive School

Brislington Comprehensive School

Colston Girls' School

Knowle Secondary School

Pen Park Girls' School

St. George Girls' School

Talks were also given for :—

Horfield and Bishopston Townswomen's Guild

Hotel and Catering Industry Training Board

Ladies Contact Club, Lawrence Hill Church

St. Gerard's Church

St. John Ambulance Brigade, Kingswood Divisions

Sutcliffe Catering Ltd.

Wansdyke Women's Institute

Wesley Memorial Methodist Church, St. George

Youth Hostels Association

Diploma in Public Health

Health Visitors' Certificate Course

Clinical (Medical) Course

Veterinary Public Health Course

Public Health Inspectors Refresher Course

Public Health Inspectors Hons. Degree Course

Social Work Course

Diploma Course for Public Health Inspectors

Diploma in Air Pollution Control Course

Student Midwives

Student District Nurses

National Trade Development Association—

Licensed House Training Course

Student Nurses

Catering and Nursing Staffs (food hygiene)

Trainee Supervisors (Food hygiene)

HOUSING

THE HOUSING ACT, 1969

The major legislative event of the year was the passing of the Housing Act, 1969. This became operative on 25th August and is designed to bring about a major improvement in the nation's housing stock and housing environment.

The Act amends and increases the ability of local authorities to make grants towards the creation of dwellings by the conversion of existing properties into self contained units, a particularly useful incentive in Bristol where many large houses exist. Measures which enable improvements to be made to dwellings lacking facilities or otherwise falling below the standard set by this Act are included in its provisions. An improvement in the general environment of an area is also

envisaged. This is intended to enable local authorities to improve areas by the formation of open spaces, the provision of car parking facilities and better street layout and access. Grants for houses in multiple occupation are made possible by the Act for the first time.

Compensation payable in respect of unfit houses or parts thereof has been amended so that well maintained payments may, subject to conditions, be paid to both the owner or occupier where the premises are vacated as a result of the making of Demolition or Closing Orders. The new Act has amended the legal standard of fitness for human habitation and to the criteria contained in Section 4 of the 1957 Act has been added "internal arrangement". This is a particularly useful addition where, for instance, a bedroom is inaccessible except via another bedroom, or a water closet is entered directly from the kitchen or other situations create inconvenience or even danger.

RENTS

Rent re-assessment is provided for where specified standards have been or will be met. This includes the transfer of a controlled tenancy and it is designed to enable the provision of better accommodation at a new 'fair rent' assessed in accordance with the Rent Act 1968. This procedure is subject to stringent conditions and any rent increase which is permitted must be phased over a period of years.

REPAIRS

An important amendment to Section 9 of the Housing Act 1957 with regard to the repair of houses is contained in the new Act. The new provision permits action to be taken in respect of a house which although not unfit for human habitation is in such a state that substantial repairs are required to bring it up to a reasonable standard, having regard to its age, character and locality.

In the past there has often been difficulty in dealing with houses which could not be classified as unfit in accordance with the criteria of the 1957 Act, but in which, nevertheless, there existed defects which were extensive and where action under the Public Health Act 1936 was inappropriate. The amendment will bridge this gap in the legislation and will undoubtedly be much used in the future.

IMPROVEMENT GRANTS

The administration of improvement grants under earlier Housing Acts has been dealt with in Bristol by the Housing Department and those provisions under the 1969 Housing Act have consequently been delegated to that Department. Although this Department is therefore not directly responsible for the operation of the grant scheme there are many facets of this activity in which we become involved and a close liaison is maintained between the two departments.

Considerable publicity both national and local has been given to the availability of improvement grants but it is often the direct and personal contact between owners and the public health inspector as a result of action by this Department that raises positive interest in the grant scheme. Indeed the public health inspector is thus a "salesman" for a means that can lead to substantial improvement and repairs to a property to the ultimate benefit of both owner and occupier.

The financial incentive to the owner has been increased by raising the level of grants payable and also initiating grant payments for certain repairs associated with improvements. The maximum improvement grant payable by a local authority has been increased from £400 to £1,000 for each dwelling provided by conversion or improved to the full standard. The limit is increased from £500 to £1,200 where buildings of three or more storeys are involved in order to meet certain costs arising from such works as fire control and fire escape requirements.

The standard grant, available to owners for the basic amenities has been increased from £155 to £200. Items included in this type of grant are a fixed bath or shower; wash hand basin; a sink; hot and cold water supply to each of these fittings and water closet readily accessible from the dwelling. The sink has been substituted for a ventilated food store which was stipulated under earlier legislation.

Special grants have been introduced in order to assist the improvement of large houses where full conversion to self contained dwellings is neither practicable or expedient. They are given at the discretion of the local authority and amount to one half of the cost of improvement. It will remain to be seen the extent to which this type of grant is sought and approved in Bristol and it should be remembered that the owner has to find the other 50% of the costs where a grant is approved. Undoubtedly the financial inducement for improvement has been measurably increased and the availability of loans under the Act in order to meet the owner's share of the costs of the works should further encourage and increase this sphere of activity. Furthermore conditions which

were attached to grants under former legislation, for example, the repayment of grant if the property was sold within three years, have now been abolished.

The increased impetus of the provision and improvement of dwellings under this Act will bring benefits to many, though in the case of numerous existing dwellings it will be many years before the standards now set out are reached. This Act, therefore, provides local authorities with the means to induce and encourage the improvement of both dwellings and their environment, the latter by the designation of general improvement areas. There will of course be many owners of property unwilling or unable to avail themselves of the means which the 1969 Act provides. The condition of their dwellings will not be improved, indeed many will deteriorate, and action by this Department's staff will be necessitated in order to secure the amelioration of resultant unsatisfactory situations.

REPAIR AND IMPROVEMENT OF BASEMENTS

The term 'basement' includes a wide variation in a type of room which is more specifically defined in the Housing Act, 1957 as an "underground room". The legal definition of such a room is one the floor surface of which is more than three feet below the surface of the part of the street adjoining or nearest to the room, or more than three feet below the surface of any ground within nine feet of the room. Other terms are applied varying from 'garden flat' to 'the dungeon' according to the source of the description and the standard of such accommodation. Thus within this definition will be found widely contrasting conditions. An underground room may be, say, four feet below ground level or the street but as it meets legal requirements regarding ventilation, natural lighting and even freedom from damp it, in fact, forms the basis of a satisfactory dwelling unit.

At the other extreme there are many underground rooms which resemble cave dwellings, the vaulted ceilings of which support the forecourts or pavements under which they extend and from which water often penetrates the room. Always dark and badly ventilated they are thoroughly miserable and unsatisfactory as dwellings. The iron pavement gratings to be found in some Bristol streets are, in many instances, the only indication that below is the domain of some individual or family imprisoned in the absence of daylight and fresh air. The opening of the small window beneath these gratings is an invitation for dust and debris to enter the room—the room which often proves to be the kitchen and where the housewife will often spend a substantial proportion of her time.

In last year's report it was indicated that a survey of a number of streets containing basement dwellings had been commenced. This routine inspection has continued, albeit on a limited scale, and beneficial results have been obtained by way of repairs and improvements and, in the worst cases, by closure. The number of underground rooms in Bristol is very considerable and there is, therefore, much scope for action in this direction in order to improve the condition of dwellings in this category. The Regulations made under Section 18 of the Housing Act, 1957 are unfortunately not as well known amongst architects, developers, owners and builders as one would wish. A greater awareness of their content and objectives amongst those responsible for property improvements and maintenance is desirable so that ultimately those who live by choice, or otherwise, in the City's underground rooms may well live in improved and satisfactory conditions.

INSIDE "THE CASTLE"

The familiar adage "an Englishman's home is his castle" implies that what goes on inside his front door is his private business. This is generally true but Parliament has ruled, for the benefit of all, that among other things "the castle" must be a healthy one, this being the aim of various Acts which over the years have sought to deal with nuisances, insanitary conditions, the provision of elementary needs and so on. In order to achieve this, Parliament has placed upon the local authority and its officers certain responsibilities and has given them the necessary legal powers to discharge those responsibilities. With regard to housing, this is stated as: "It shall be a duty of every local authority to cause an inspection of their district to be made from time to time with a view to ascertaining whether any house therein is unfit for human habitation".

The practical application of this duty is one which local authorities and their officers have to undertake and in so doing surveys, inspections, reports and decisions are made and action taken. Inspection of dwellings usually means entering the front door of "the castle" and here Parliament has provided the necessary legal power of entry for the purpose. The implementation of this right of entry is one of "the tools of the job" for the local authority's officers. It is one which is used with great discretion and in fact the powers provided are rarely used, considering

the large number of visits made to people's homes. Inspections may be necessary as a result of complaints or to carry out surveys in order to ascertain the condition of dwellings forming a complete area or the condition of an individual house where the need for inspection is suggested by the evidence available. The latter is often the case when, for instance, a dwelling appears sadly neglected and it would probably one day become a cause of complaint either from neighbours or some other source. Meanwhile someone is living there and in apparently bad conditions, surely a case for the local authority to investigate and perhaps help the occupant, in practice not always a simple matter.

Two such examples come to mind. Towards the end of 1968 a house situated in a terrace, its exterior unpainted for years, the privet hedge approximately eight feet high and filling the front garden and curtains rotted with age and almost falling from their rails, was visited by a public health inspector. At the time of the visit the elderly occupier was polishing the jagged but gleaming brass doorstep. Was she living in an unfit house? A tenant unwilling to complain about her landlord? Could she be helped to spend her remaining years in rather more comfortable surroundings? The answer was not immediately forthcoming as all approaches and attempts to discuss the matter were rebuffed. However, she did consent to consider it after Christmas, but in the New Year there was still no response. One day the inspector noticed that the once gleaming brass doorstep had become tarnished and he became anxious for the old lady's welfare. Upon enquiring it was found that she had been taken to hospital and was, therefore, in good care.

She eventually returned to the house for the purpose of admitting the inspector and it was revealed that she was in fact the owner of the property, having inherited it from her husband twenty-two years previously. No repairs or maintenance had been carried out during that time and rain had penetrated the structure and had even caused the rotting of timber at ground floor level, the rear annexe structure was nearing collapse and there was considerable general disrepair. There is a happy ending as the lady is now comfortably settled in a new home and a scheme to renovate her former one is in hand, the commencement of which should be made before the neighbours complain of the condition of the adjoining 'castle'.

Enquiries at another house apparently in a similar condition brought an outright refusal from the occupier to permit an inspection or even discuss the matter. After many unsuccessful attempts access was eventually obtained but only after the statutory power of entry was invoked. Ironically while the front door remained barred the back door was incapable of being closed as the hinges had completely rusted, it being opened by the elderly occupier lifting it bodily out of the opening. This is an indication of the atrocious condition of the remainder of the dwelling. In this case the occupier was the tenant, the owner being eighty-five years of age and unable to visit the property because of ill health.

A solution to problems of this type must be sought but not everyone will accept help even when it is possible to offer it—they wish to remain 'independent'. Some accept their 'castle' with rain pouring through the roof and icy blasts entering through ill fitting doors. Eventually they succumb to their environment and their care in hospital becomes a burden on the community. Should not, therefore, the 'castle' be invaded in an attempt to ensure that conditions do not deteriorate to such a level that hospital care for the occupants becomes necessary or the building itself becomes an eyesore and a nuisance to neighbours?

HOUSES IN MULTIPLE OCCUPATION

Efforts to ameliorate conditions in these types of houses have been made but the scale of the problem is considerable and the rate of progress therefore inevitably slow. Such factors as changing tenancies, the changing ownership of properties, the inaccessibility of some lettings, the reluctance of owners and occupiers to co-operate, the non-payment of rent and consequent reluctance of owners to carry out improvements to their property and the generally poor condition of the environment all influence the opportunity to obtain satisfactory results. Whilst some progress has been achieved the task is an onerous one and often frustrating. Much, therefore, remains to be done. It is hoped, however, that owners will take advantage of the Housing Act, 1969 in obtaining grant aid for the provision of extra facilities. If they can be persuaded to do this then, with close liaison between this Department and the Housing Department, a considerable amount of squalor existing in the city today can be removed.

DEMOLITION AND CLOSING ORDERS

For a variety of reasons the vacation of dwellings in accordance with the requirements of such Orders does not necessarily take place either automatically or expeditiously. As a result some premises have remained occupied long after an Order has become operative. All such cases are now

reviewed regularly and if any remain occupied twelve months after the Order comes into operation action is then taken to ensure compliance with the Order. This policy has been pursued and all long outstanding cases have been dealt with.

MEAT INSPECTION

The slaughtering of animals at the Public Abattoir during 1969 shows a decrease of some 13·02%. While this reflects the national trend (the national decrease is alleged to be around 10%) the position is far from satisfactory. The number of cattle slaughtered has decreased by just over 7%, some 3% more than last year, and it would appear that the national shortage of cattle has maintained a high market price leading to a reduced demand. The slaughter of calves has again been considerably reduced but this may be a healthy sign as it may be an indication that they are now reared to a more mature age. Sheep slaughtered this year have reduced by approximately 15%, the first time for some years. This reflects the national trend and it appears that sheep rearing has not been an economic proposition resulting in a rather drastic fall in numbers. The number of pigs slaughtered at the abattoir and the bacon factory have again increased. Once again this follows the national trend and, as the home-killed bacon allocation has been increased, it is anticipated that this upward trend will continue.

Although two cows, four heifers and six calves were sent for slaughter in accordance with the Tuberculosis Order, 1964 and 363 Irish steers and heifers were also slaughtered, routine post mortem inspection revealed no lesions of tuberculosis in any animal. Five Irish cattle, however, were affected with cysticercosis giving an incidence of 1·38%. Whilst this is higher than the average incidence in England, it is considerably lower than last year's incidence in Bristol. Seven steers and heifers and two cows, all of English origin, were found to be affected with cysticercosis giving an incidence of 0·07%, approximately the same as last year. The carcasses of all animals affected with cysticercosis were subjected to cold storage treatment in accordance with the Meat Inspection Regulations, 1963 and all such carcasses received by the local cold stores from outside local authorities were checked regularly and stamped at the end of the treatment period.

Most of the modernisation scheme at the Abattoir is now complete. The walls of the main slaughter hall have been lined with fibre glass to a height of twelve feet, thus providing a very smooth finish. New chillers have been constructed and are ready for use but because of the difficulty of making them burglar-proof they have not yet been used, although they are urgently needed. In the rearrangement of the slaughtering methods the line system adopted for beef dressing, complete with a hide puller, is capable of quite a wide variation. Once the cattle have been stunned and the carcasses hoisted they do not touch the floor again and, with the use of sprays and brushes, a well finished, clean carcass is presented to the butcher. The sheep line incorporates a new idea which consists of a movable cratch capable of speed variation, thus removing all manual lifting and handling of carcasses. After stunning, a conveyor lifts the sheep which are then stuck and gravity fed to the moving cratch where they are legged and breasted before being raised once again by the conveyor to a skid rail for finishing. A new gut room has been built over the old hide room thus permitting cattle guts and tripes to be mechanically hoisted to this room. The fat is conveyed through a pipe line by compressed air. The guts, paunches and fat of sheep are removed from the slaughter hall by the same methods. All stomach and intestinal contents are discharged from the gut room via a chute into a large container which is removed by a market gardener as often as necessary, twice a week usually proving sufficient. It is hoped that in the near future more satisfactory arrangements can be made for the disposal of the blood.

Many mechanical aids have been incorporated, for example, platform hoists for the slaughtermen, flaying knives operated by compressed air, breasting and hoof saws, roller hoists, washing facilities sited at convenient points with steam sterilizers for knives and a saw for splitting carcasses. With the provision of this additional equipment some failures are bound to occur and it is hoped to enter into a contract with the City Engineer and Planning Officer's Department which will provide for the maintenance of all electrical equipment. As cold water sprays were found to have an adverse effect on sheep carcasses warm water was introduced and so far this has had the desired effect. Electric lighting in all areas has been improved and now complies with the Regulations proving a great improvement on the old standards. The pig slaughtering area has not yet been completed and it is hoped that the City Architect will be able to expedite the completion of this work so that application can be made for an export licence.

Continued use has been made of the Abattoir for lecturing and demonstration purposes. Under the modernisation scheme provision was made for a lecture room but the unit provided

is so unsatisfactory that little use can be made of it. It is hoped that further money can be spent on it and that the unit can be completed to a reasonable standard so that it can then be used to its fullest extent. Parties of students from both colleges and schools have visited the Abattoir and there has been a continued demand for specimens for teaching and research purposes. The collection and preparation of the large quantity of this material is time consuming, particularly as it is almost a daily demand during the school terms.

Staff problems at the Abattoir have been particularly acute this year. While we were operating in the temporary slaughter hall some of the cleaning could only be carried out satisfactorily on Sundays and, as we seemed to have more than our fair share of staff absences, the cleaning problems became very acute. As we are now operating the new slaughter hall it is even more necessary that the premises should be adequately cleansed. The shortage of staff is still a problem and it appears that seven day working is beginning to take its toll as it is becoming increasingly difficult to get staff to work on Sundays. Some drastic reorganisation is necessary but when that will be forthcoming is not yet clear.

The number of pigs slaughtered at the bacon factory increased for the second consecutive year. Last year was exceptional but this year the increase is just over 8% and if the bacon allocation increase is reflected here, a further increase can be expected next year. A new type of teat drinking water supply has been installed in the lairs and with the complete redecoration of the slaughter area and lairs, the replacement of all wooden doors by metal ones, the area licensed as a slaughter house is in a very satisfactory condition. A new chiller has also been installed to provide controlled temperature conditions for the sides of pig meat prior to preparation for bacon.

MEAT INSPECTION

All animals slaughtered in Bristol during the past year have been inspected in accordance with the Meat Inspection Regulations, 1963. The permanent staff at the Abattoir have been supplemented by district public health inspectors during holidays, illness and incidental contingencies. Sheep and goats slaughtered for the followers of the Mohammedan religion are slaughtered by Mohammedans licensed by the local authority to slaughter by stunning with the aid of the electro-lethal. This is in accordance with the pronouncement of the Imam, The Shah Jehan, The Mosque, Woking, Surrey.

Dr. H. R. Cayton, Director of the Public Health Laboratory, and his staff must be thanked once again for their continuing assistance in helping to determine and resolve abnormal conditions found in food animals. Dr. H. D. Crofton of the Zoology Department, University of Bristol has again been very helpful in identifying difficult parasitic conditions. During the year some 825 pig diaphragms were submitted for the detection of the parasite *Trichinella spiralis*, fortunately with negative results.

Complaints from the public have been rather varied this year. One complainant alleged that a tape worm had been found in a frozen chicken but an inspection revealed that the tape worm was, in fact, part of the oesophagus. Several complaints involved meat and offal purchased from supermarkets but all were resolved without recourse to litigation.

Following the prohibition of Argentine bone-in meat, a new trade is developing in chilled cuts of boneless beef and sold under the description of Argentine chilled "Cryovac" beef. "Cryovac" is the name given to the process of packing special cuts of beef in plastic film. The meat is sealed in the plastic film so as to exclude air, the film being shrunk in hot water so that it tightly envelopes the meat and it is then boxed and frozen. The shelf life of this commodity is alleged to be approximately six weeks but having regard to the fact that the temperature at which this type of meat is kept is 28.5° to 30°F., this period of time will vary as the temperature varies. This being a new venture its reception is a little mixed but unless care is taken when loading and unloading to ensure that the top of the carton is always placed uppermost, staining of the fat is bound to occur. The main trouble experienced so far is perforation of the plastic bag with the consequential loss of vacuum thus causing the rapid decomposition of the meat. Judgement of the meat contained in a perforated bag is total condemnation. Trimming is not acceptable as it is considered that the meat should be treated in exactly the same way as a can of meat the vacuum of which has been lost, that is total condemnation.

MEAT DEPOTS : COLD STORES

All the meat depots wholesaling fresh meat, whether English or imported, have been maintained in a satisfactory condition. Most depots have provided, or are providing, chiller accommodation for the "Cryovac" beef.

Generally, the public cold stores have been maintained to a reasonable standard. It was not until the middle of this year that it was possible to deal with the last of the dried egg affected by the floods which occurred in July, 1968. The usual procedure was followed, the egg being reprocessed and used for animal feeding. A new cold store is under construction at Avonmouth and will provide modern facilities for the handling of containers.

KNACKERS' YARDS AND OFFENSIVE TRADES

Only one licensed knacker's yard remains in the City and it performs a very useful function in disposing of animals suitable for the pet meat trade. These premises, although sub-standard, comply with the relevant Regulations. The Meat (Sterilization) Regulations came into operation on the 1st November, 1969. These ensure that the meat of all animals derived from a knacker's yard as well as all unfit meat from a slaughter house must be sterilized before being sold for pet meat. These Regulations have caused some consternation amongst dog breeders and owners and trainers of racing dogs because of their inability to obtain raw meat if the knacker's yard has facilities for sterilization on the premises.

One case of anthrax was confirmed during the latter part of the year which meant that the sterilization of the premises was made easier by the lower ambient temperature. One cow carcass was infected but the carcasses of several small animals as well as one other cow carcass had to be burned. The butane burners are much cleaner and quicker than the oil burners used previously and with the liberal use of polythene sheeting on the floor control is made very much easier.

Some of the offensive trades which process organic waste from slaughterhouses and butchers shops give rise to serious nuisance from effluvia. The experimental plant mentioned in last year's report is now in operation and whilst many teething troubles have been experienced it is now operating fairly successfully. If its successful operation can be maintained it is the firm's intention to instal a larger plant in order to deal with the larger quantity of organic material handled at their other premises.

SAMPLING

(a) Pet Shops

The sampling of meat and offal from pet shops has continued. Details of these samples are shown in Table 13 and the types of salmonellae isolated are as follows :

KNACKER MEAT											PIGS				Cooked Meat	Totals
		Meat	Tongue	Kidney	Liver	Spleen	Heart	Veal	Kangaroo Meat	Butchers' Meat	Sewer Swabs	Bedding from Cattle Lairs	Mesenteric Glands	Liver		
S. agama	—	—	—	—	—	—	—	—	1	—	—	1	—	2
S. anatum	—	—	—	—	—	—	—	—	—	—	1	—	—	1
S. barietty	—	—	—	—	—	—	—	—	1	—	—	—	—	1
S. binza	1	—	—	—	—	—	—	—	2	—	—	—	—	3
S. brandenburg	—	—	—	—	—	—	—	—	—	—	2	—	—	2
S. dublin	3	1	—	2	—	1	1	—	4	1	1	—	—	14
S. einsbuettel	—	—	—	—	—	—	—	1	—	—	—	—	—	1
S. indiana	1	—	—	—	—	—	—	—	—	—	—	—	—	1
S. naigoya	—	—	—	—	—	—	—	—	4	—	—	—	—	4
S. orion	—	—	—	—	—	—	—	—	1	—	—	—	—	1
S. stanleyville	—	—	—	—	—	—	—	—	—	—	1	—	—	1
S. typhimurium	2	—	1	—	1	1	—	—	11	—	3	1	1	21
S. var jena	—	—	—	—	—	—	1	—	—	—	—	—	—	1
S. zehlendorf	—	—	—	—	—	—	1	—	—	—	—	—	—	1
Specie	—	—	—	—	—	—	—	—	1	—	—	—	—	1
New sero type	—	—	—	—	—	—	—	—	1	—	—	—	—	1
Totals	7	1	1	2	1	1	3	1	26	1	8	2	1	56

The type of Salmonellae isolated since this scheme of sampling commenced in 1961 are summarised in the following table :

			PIGS													Total
			Meat	Liver	Heart	Kidney	Tongue	Kangaroo Meat	Butchers' Meat	Sewer Swabs	Bedding from Cattle Lairs	Mesenteric Glands	Caecal contents	Liver	Miscellaneous	Total
S. adelaide ...	...	...	—	—	—	—	—	4	—	—	—	—	—	—	—	4
S. agama ...	...	...	1	2	—	—	—	—	—	1	—	—	—	1	—	5
S. anatum ...	...	...	1	2	—	—	2	3	—	—	—	1	—	—	1	10
S. arechavaleta ...	...	...	—	—	—	—	—	1	—	—	—	—	—	—	—	1
S. bahnenfeld ...	...	...	—	—	—	—	—	1	—	—	—	—	—	—	—	1
S. barietty ...	...	...	—	—	—	—	—	—	—	1	—	—	—	—	—	1
S. bovis moribificans ..	...	...	6	1	—	—	—	—	—	—	—	—	—	—	—	7
S. benza ...	...	...	1	—	—	—	—	—	—	2	—	—	—	—	—	3
S. brandenberg ...	...	...	1	1	—	—	—	—	—	—	—	2	—	—	1	5
S. chester ...	...	...	1	—	1	—	—	4	—	—	—	—	—	—	—	6
S. derby ...	...	...	1	—	—	—	—	—	—	—	—	—	—	—	—	1
S. dublin ...	...	...	32	23	7	1	4	1	—	6	1	1	—	—	—	76
S. einsbuettal ...	...	...	—	—	—	—	—	—	1	—	—	—	—	—	—	1
S. fischerkiety ...	...	...	—	—	—	—	—	—	—	—	—	1	—	—	—	1
S. give ...	...	...	—	—	—	—	—	—	1	—	—	—	—	—	—	1
S. haelsingberg ...	...	...	1	—	—	—	—	—	—	—	—	—	—	—	—	1
S. heildelburgh ...	...	...	1	—	—	—	—	—	—	—	—	1	—	—	—	2
S. indiana ...	...	...	1	—	—	—	—	—	—	—	—	—	—	—	—	1
S. meleagridis ...	...	...	3	—	—	—	—	—	—	—	—	—	—	—	—	3
S. mikaivasema ...	...	...	—	1	—	—	—	—	—	—	—	—	—	—	—	1
S. minnesota ..	...	...	—	—	1	—	—	—	—	—	—	—	—	—	—	1
S. montevideo ...	...	...	—	1	—	—	—	—	—	—	—	—	—	—	1	2
S. muenchen ...	...	...	—	—	—	—	—	1	—	—	—	—	—	—	—	1
S. naigoya ...	...	...	—	—	—	—	—	—	—	4	—	—	—	—	—	4
S. newport ...	...	...	1	—	—	—	—	—	—	—	—	—	—	—	—	1
S. oranienberg ...	...	...	1	—	—	—	—	1	—	—	—	—	—	—	—	2
S. orion ...	...	...	—	—	—	—	—	1	—	1	—	—	—	—	—	2
S. roona ...	...	...	—	—	—	—	—	—	—	—	—	1	—	—	—	1
S. saint paul ...	...	...	1	—	—	—	—	—	—	—	—	—	—	—	—	1
S. pubislaw ...	...	...	—	—	—	—	—	1	—	—	—	—	—	—	—	1
S. san diego ...	...	...	—	—	—	—	—	1	—	—	—	—	—	—	—	1
S. singapore ...	...	...	—	—	—	—	—	—	—	—	—	1	—	—	—	1
S. stanleyville ...	...	...	—	—	—	—	—	—	—	—	—	1	—	—	—	1
S. taksiny ..	...	...	—	1	—	—	—	—	—	—	—	—	—	—	—	1
S. thompson ..	...	...	1	—	—	—	—	—	—	—	—	—	—	—	—	1
S. typhimurium ...	...	...	29	16	7	7	3	1	—	14	1	5	1	1	1	86
S. var jena ...	...	...	2	1	1	1	1	1	—	—	—	—	—	—	—	7
S. zehlendorf ...	...	...	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Specie ...	...	...	7	—	3	—	—	3	—	1	—	1	—	—	—	15
Unidentified ...	...	...	—	—	—	—	—	—	—	1	—	3	—	—	—	4
New sero type ...	...	...	1	—	—	—	—	—	—	1	—	4	1	—	—	7
TOTALS ...	...	...	93	49	20	9	10	25	2	32	2	22	2	2	4	272

All pet meats sampled have been tested for evidence of Shigellae and Salmonellae but to date no Shigellae have been isolated. Positive Salmonella samples have decreased again this year and this is mainly attributable to the reduced number of positive Kangaroo meat samples (37·50% reduced to 23·08%). Many of the pet shops are now unable to obtain raw meat because of the new Meat (Sterilization) Regulations and the demand for cooked meat is not very great. For this reason there has been an increased demand for sheep paunches at the Abattoir and these are now sold from the Abattoir in order to enable pet owners to have a reasonably priced article for their pets. It will be noted that one sample of cooked pet meat was still reported as positive for salmonella, the type isolated being *S. typhimurium*. Whether this was due to contamination after cooking

or insufficient cooking has not been determined but this gives, however, a field for further investigation which we shall endeavour to carry out.

(b) Butchers' Shops and Meat Depots

Table 14 sets out the types of meat sampled and the country of origin. Of the 127 samples submitted only one positive was reported when *S.einsbuettel* was isolated from Irish beef. At present no significance can be attached to this result as repeat samples produced negative results. It is hoped to submit a series of "Cryovac" beef samples for bacteriological examination as soon as the necessary arrangements can be made.

(c) Pig Mesenteric Glands and Liver

It will be seen from Table 13 that 2.25% of the pig mesenteric glands gave positive results when examined for *Salmonellae*; this is a slight reduction on last year (3.01%). The new sero type isolated this year was found in one sewer swab in the early part of the year. The source of this could not be traced but it has been assumed that it was the original piggery. The submission of pig livers taken from the same animal as the mesenteric glands already submitted for bacteriological examination has been commenced in order to detect any variations. Two livers have been reported as positive but the numbers submitted are as yet too small to draw any conclusions.

(d) Sewer Swabs and Bedding from Cattle Lairs

Sewer swabs have been extended this year to include the knacker's yard, with rather startling results. Of the 104 sewer swabs taken, 28 were taken from the knacker's yard and produced 17 positives (60.71%), 40 from the bacon factory with 7 positives and 36 from the Abattoir with 2 positives (5.55%). After results such as these the introduction of the Meat (Sterilization) Regulations was not a day too soon. In all fairness, it must be said that the sewer swabs were left in place for a week at a time and therefore, cross contamination could have occurred. More frequent sampling would demand more time than can be spared at the present time.

(e) Miscellaneous

Eight samples of sausages as supplied to school kitchens were submitted for analysis and all were reported as genuine. An insect found in some frozen beef was reported as a weevil. The remarkable fact about this incident is that the meat was Australian frozen boneless beef and the insect was embedded in the thick part of the pack. It was frozen hard and yet within approximately 15 minutes it had thawed out and started to crawl. An insect embedded in a piece of cheese was confirmed as *Blatta orientalis*. Again this was an imported product, cheese, but the Country of origin was uncertain.

After a report that arsenic had been found in pigs liver, it was decided to submit specimens to the City Analyst. Of the 38 samples submitted, 19 contained less than 1 p.p.m. and 19 contained more, with 3 of these samples containing more than 3 p.p.m. No action was taken other than the routine notification to the Medical Officer of Health of the area concerned. It has been suggested that this arsenic was derived from a medicine which is fed to pigs to reduce scouring and that the form of arsenic residual in the liver is not harmful. As far as is known this theory has not been proved but if future sampling reveals that the recommended standard is exceeded persistently, further research will have to be carried out.

SCHOOL KITCHENS

Visits are made to school kitchens only upon receipt of a complaint which is fortunately an infrequent occurrence. More often than not the trouble is due to faulty refrigeration and little action is therefore warranted. The few butchers handling these contracts do a very good job of work, try their best to supply satisfactory meat and are very co-operative in the event of any trouble.

PIGGERIES

Details of the number of pig and poultry keepers, including the number of visits made by public health inspectors to their premises are shown in Table 15. Piggeries in the City continue to present certain difficulties most of which stem from the fact that this is a part time occupation for the keepers. All the piggeries in the Bedminster Down area have been discontinued because the land on which they were sited was required for tipping purposes; of these two have been resited and one rebuilt.

POULTRY INSPECTION (processing premises)

There are no poultry processing establishments within the district.

MILK AND FOOD INSPECTION

NEW OR AMENDED LEGISLATION

THE SOLVENTS IN FOOD REGULATIONS 1967

The Regulations came into operation on the 3rd November, 1969 and apply to solvents used in foodstuffs to dissolve substances which are not readily soluble in water, such as flavouring essences. They prohibit the sale or importation of any solvent not specified in the first schedule or any food containing such a solvent, prohibit the advertisement of any solvent which is not a permitted solvent and impose requirements as to the labelling of permitted solvents and provide that when food is certified by a public analyst as containing any solvent not permitted by the Regulations, that food may be treated as unfit for human consumption for the purposes of section 9 of the Food and Drugs Act, 1955. The Regulations do not apply to food or solvents which are intended for export.

THE FOOD (CONTROL OF IRRADIATION) (AMENDMENT) REGULATIONS 1969

The Food (Control of Irradiation) Regulations 1967, which came into operation on 1st June 1967, prohibit, with one exception, the application of ionising radiation to food intended for human consumption. The amendment Regulations which came into operation on 1st December 1969 make a further exception so that the irradiation of food for patients who are certified by a registered medical practitioner as requiring a sterile diet as an essential factor in their treatment is permitted.

THE CANNED MEAT PRODUCT (AMENDMENT) REGULATIONS 1968

These Regulations amend the Canned Meat Product Regulations, 1967 which came into operation on 31st May 1969, in four ways.

- a) They exempt canned sliced bacon from any requirement as to lean meat content.
- b) set a separate standard for the meat content of chopped or minced meat which is suitable for slicing.
- c) restrict the use of the expression "ready meal" on the label of a canned meat product.
- d) apply labelling requirements to canned meat products only when such products are in containers.

THE SAUSAGE AND OTHER MEAT PRODUCT (AMENDMENT) REGULATIONS 1968

These Regulations amend certain provisions of the Sausage and Other Meat Product Regulations 1967 by :

- a) exempting from the principal regulations a canned meat product after its removal from its container; and
- b) restricting the use of the expression "ready meal" in relation to a meat product.

MILK AND DAIRIES (GENERAL) REGULATIONS 1959

Circulars F.S.H. 2/69 and F.S.H. 4/69—Approved chemical agents

The products described in the Appendix to these circulars comprise those approved by the Ministry of Agriculture, Fisheries and Food and the Secretary of State for the Department of Health and Social Security between 1st October, 1949 and 30th June, 1969, under the Milk and Dairies Regulations for the cleansing of milk tankers, vessels or appliances. The use of these chemical agents provides an alternative method to scalding with boiling water or steam.

THE LIQUID EGG (PASTEURISATION) REGULATIONS 1963

As a result of recent experience, I submitted a report to the Social Services (Environmental Health) Sub-Committee, dealing with some practical difficulties which might arise from the legislation.

The Regulations require the pasteurisation of liquid egg and state that no person shall USE as an ingredient in the preparation of food intended for sale for human consumption, liquid egg, which purports to be pasteurised but which does not comply with the Regulations. Whilst, at first sight, it might appear that a processor is committing an offence, the Town Clerk and Chief Executive Officer's Department advised that the only offence recognised in the Regulations is when liquid egg is actually USED in the preparation of food. Therefore a baker, as user, may

commit an offence quite unwittingly and a local authority appears to have no power to take action against the real offender, the processor.

The matter was taken up with the Association of Municipal Corporations. The Ministry of Agriculture, Fisheries and Food who also shared an interest indicated that when an amendment is being considered, the question of 'use' and 'sale' would be re-examined.

MATTERS OF INTEREST

Groundnuts

Early in January a notification was received from the Liverpool Port Health Authority regarding a consignment of groundnuts destined for Bristol. Results of the examination of samples taken in Liverpool had indicated an excess of aflatoxin. Aflatoxin is a mycotoxin produced by the growth of the mould *Aspergillus flavus* on peanuts which usually become affected as a result of damp storage conditions. Aflatoxin is a very stable substance and when fed to birds and animals it has invariably been accompanied by the growth of malignant tumours in the liver. Although there are no known instances of this occurring in humans the consumption of peanuts containing Aflatoxin is considered to be a serious hazard and peanuts so affected should be regarded as unfit for human consumption.

Enquiries were made locally and it was ascertained that the consignment of peanuts were intended for bird and animal feeding and were sold to pet shops only. Ten pet shops were visited in various parts of the City and in six of these, peanuts were sold. All the vendors stated that the nuts were suitable for human consumption. Six samples were procured and submitted to the Public Analyst for examination all of which were reported free from Aflatoxin. A further six samples taken later in the year produced similar negative results.

Powdered pears

A complaint was received from a shopkeeper via the local police concerning a bag of white powder discovered in a box of imported pears. The complainant was anxious because of the possibility of the powder being poisonous causing contamination of the fruit, several pounds of which had already been sold. Subsequent analysis identified the powder as chalk which was included in the packaging as a moisture and infestation control. The shopkeeper was reassured within twenty-four hours that the powder was harmless and that she could safely sell the remainder of the pears.

Foreign body in peas

A complaint was received alleging that part of an insect had been found in a can of garden peas. The inspector, who was unable to identify the foreign body macroscopically, submitted it to the Public Analyst for further examination. It was identified as of plant origin, being half the flowering head of a member of the compositae family of which the daisy is the commonest member, and it was, therefore, quite harmless.

The icing that turned green

After baking and icing a cake a housewife was upset to find, three days later, that the icing had turned green. Chemical analysis revealed the presence of copper to the extent of 2.7 p.p.m. which, although not considered serious, was enough to warrant further investigation. It was discovered that the usual ingredients for white icing had been used except that instant coffee had been added for flavouring. In addition, the mixture had been heated to 240°F. during cooking and this temperature had been checked with a brass backed thermometer.

It was concluded that the 2.7 p.p.m. of copper had combined with the organic pigment present in the coffee flavouring to give the icing this disagreeable appearance, the copper having gained access by the use of the brass backed thermometer.

FASCIOLIASIS

Due to widespread publicity given by both television and the local press to the increased incidence of fascioliasis in humans, a general survey of watercress was conducted combined with the usual routine sampling. Samples of cultivated watercress were taken from all wholesalers in the city and all proved to be free from contamination.

Sometime later, however, an anonymous telephone call was received stating that a man had been seen to collect watercress from a stream located on the south side of the City and it was suggested that this stream was polluted. The stream was finally located in a remote part of a country estate on the outskirts of the City and as reported it had produced a very large crop of watercress. Samples of the cress and water were taken from the stream for chemical and bacteriological examination. Numerous snails were present but none of the varieties which act as the

intermediate host of *Fasciola hepatica* was found. The water also showed evidence of recent pollution but, as the stream runs through open grazing land, this is to be expected. Instructions to clear the stream of watercress were immediately complied with.

SURVEY INTO ANTIBIOTIC RESISTANT ORGANISMS

A special survey lasting 45 weeks and involving both the Department of Bacteriology of the University of Bristol Medical School and public health inspectors was completed in April. The survey was concerned with the prevalence of certain antibiotic resistant organisms in Bristol residents. During this period a large number of people were interviewed and, of these, 93 donors were selected to participate. The survey, although providing very useful data on an important subject, proved rather more time consuming than was originally anticipated. The selection procedure, which included ten different age groups and specifically excluded people already suffering from gastro-intestinal disease, occasioned some difficulty in providing suitably qualified donors at the correct time.

THE PHARMACY AND POISONS ACT 1933

The Poisons (No. 2) Rules, 1968

The above Act together with the Rules made under it came into full effect on 1st May, 1936. At that time the fee was 7/6d for a new application, 5/- for a renewal and 1/- for a change of address or other alteration in the Local Authority's list. The above Poisons Rules amend the fees payable by virtue of Rule 34 to £1.5.0. for a new application, 15/- for a renewal and 5/- for a change of address, these being the first increases in fees for 33 years.

A larger number of shopkeepers than usual, a total of 54, failed to make application for their name to be retained on the list and it is conceivable that this was due, in some measure, to the increase in fees. All but a few have been investigated and appropriate action taken where necessary. The large majority had genuinely withdrawn Part II poisons from sale.

MILK SAMPLING

Chemical composition

750 samples were submitted for chemical analysis a number of which had been obtained from milk vending machines. Only three of the total submitted were reported as unsatisfactory one of which, a formal sample of Channel Island milk, was found to be deficient in milk fat. As this contravened the Milk and Dairies (Channel Islands and South Devon Milk) Regulations, 1956, legal proceedings against the dairy concerned were instituted and these resulted in a fine of £40 with £5 costs.

Biological examination

59 samples of raw milk were submitted and, of these, two were found to contain *Brucella abortus*. The appropriate County Authority was advised in each case.

Designated milk

680 samples of pasteurised milk, including 82 from schools, were submitted for the statutory tests for heat treatment and keeping quality. Only nine failures were reported, none of which involved milk supplied to schools. 39 samples of sterilised milk and two samples of ultra high temperature milk satisfied the prescribed tests. 87 samples of untreated milk were examined and two failed the test for keeping quality. Although many of these samples were obtained from vending machines, the two failures were not from this source.

Vending machines

During the year several machines have been removed and sales from them discontinued. Other machines have, however, been sited in different locations and regular sampling has been carried out from the twenty-seven machines now in operation.

FOOD POISONING AND DYSENTERY

On 10th November, 1969 routine work involved with dysentery and food poisoning cases passed from the Public Health Inspectorate to the Epidemiology section at the Central Clinic. As a result the undermentioned figures relate only to those months prior to this date.

Public Health Inspectors will, of course, continue to be notified of cases of food poisoning and will investigate the food aspects of these, as in the past.

Notification and Confirmation

<i>Disease</i>						<i>Notified</i>	<i>Confirmed</i>
Salmonellae	...	...	...	...	...	106	112
Para-typhoid B	...	...	...	...	...	1*	1
Para-typhoid A	...	...	...	...	...	1	2
Typhoid	...	...	...	...	...	1	1
Dysentery (Sonne)	...	...	...	...	...	310	377
Dysentery (Flexneri)	...	...	...	...	...	0	0

* Notified originally as contact.

At least 18 different serotypes of *Salmonellae* were encountered and details of these are as follows:—

<i>S. agama</i>	<i>S. heidelberg</i>
<i>S. anatum</i>	<i>S. indiana</i>
<i>S. bovis morbificans</i>	<i>S. infantis</i>
<i>S. brandenburg</i>	<i>S. montevideo</i>
<i>S. bredeney</i>	<i>S. muenchen</i>
<i>S. dublin</i>	<i>S. newport</i>
<i>S. enteriditis</i>	<i>S. oranienburg</i>
<i>S. haifa</i>	<i>S. panama</i>
<i>S. typhimurium</i>	

TYPHOID

Upon his return in August from a camping holiday on the continent, a resident of Southampton visited his grandparents in Bristol. Whilst in the city he became ill and was admitted to hospital where he was found to be suffering from typhoid fever. The usual investigations were carried out and contacts in other parts of the City were traced and cleared.

PARA-TYPHOID A

Notification was received on 28th August of a 13 year old Pakistani boy who had been admitted to Ham Green Hospital and reported to be suffering from para-typhoid A. The home was visited and all household contacts checked. This exercise proved more difficult than usual because of language difficulties, the services of an interpreter having to be obtained. The child's mother was found to be a carrier of para-typhoid A.

PARA-TYPHOID B

A complex situation occurred when a notification from the Medical Officer of Health for Aberdare stated that a resident in his area who had recently returned from Spain had developed symptoms which were later confirmed to be para-typhoid B. Five of the reservations for this holiday were made in Bristol and, with the help of the travel agents concerned, twenty-four primary contacts were traced. It was established that they had all stayed at the same suspect hotel; eight of these were not resident in Bristol and the relevant information was passed to the appropriate local authority in these cases. The remaining sixteen were interviewed and requested to provide faecal specimens and in due course fourteen were cleared.

The positive results were obtained from two girls who had been on holiday with two other colleagues from their place of work. It was then discovered that one of the infected girls lived just outside Bristol, in Downend, and the Medical Officer of Health for South Gloucestershire was immediately alerted. The other infected girl was placed under medical surveillance and the normal procedures with regard to food handlers and family contacts were followed. It was also felt necessary, as a precautionary measure, to screen the fifty or so girls who had had brief contact with the patients on their return to work from holiday. This particular investigation involved the section in a considerable amount of extra work at a time when salmonella investigations were at a peak.

General

In addition to the routine investigations, numerous follow ups were carried out on people who had been notified as contacts with typhoid cases. These were invariably accompanied by a history of continental holidays but no positive cases were discovered amongst people screened in this way.

NOTES WITH REGARD TO TABLE 24

The table comprises

- (a) complaints received direct from the public
- (b) complaints received from other authorities
- (c) defects, irregularities etc. noted as a result of routine sampling by the Inspectorate.

FOREIGN BODIES

"Personal Items"

Included under this heading are items of a personal nature which can be deemed to have entered the foodstuff as a result of inadequate personal hygiene and comprise cigarette ends, rubber gloves, hair, cigarette ash and coins.

"Building Materials"

Foreign bodies entered under this heading include stone, screws, nails, wood and wire. These complaints are attributable to building or repair work being carried out at the place of manufacture or to misuse of such items as bottles followed by inadequate cleansing or failure to reject.

"Transit and Packing Materials"

Such items as string, brown paper, elastic bands and drawing pins, all being connected with either the transit and packing of the finished product or of some ingredient thereof.

"Not True Foreign Bodies"

This heading includes items which are of the nature of the product but are not of the quality or substance normally demanded. Examples include globules of fat, scorched particles of powder, fish skin, soiled dough etc.

ATMOSPHERIC POLLUTION

This year has been a most active one as far as smoke control progress has been concerned. Throughout the year the section has been dealing with grant applications received from residents of the City and County of Bristol No. 8 Smoke Control Area, which will become operative in October 1970. The City's No. 10 Smoke Control Order, which covers part of both the Cabot and St. Philip and Jacob Wards, was confirmed by the Minister without amendment in October, with an operative date of October 1971.

These latest orders will bring a further 10,592 premises covering approximately 2,454 acres under Smoke Control, and will bring the total number of premises in the City under control to 28,696. It is interesting to record that this is the first Smoke Control Order that has been made where there have been no objections, and it would appear from the attitude of both the public and the fuel suppliers that there has been a gradual change of opinion in favour of the City's Smoke Control programme and a more alert and active concern for air pollution generally over the last twelve months. This is a healthy and encouraging position and a welcome sign for those advocates of clean air who have been trying to convince the public since the early 1950's that smoke control areas are for the general benefit of the community.

During the latter half of this year survey work commenced on two more areas of the City, the Clifton Ward and the Avon Ward. The former, the proposed No. 11 Area, consists in the main of tenanted accommodation largely occupied by persons whose stay is of limited duration. This area, when it is operative, will link the Nos. 7, 8 and 10 Smoke Control Areas. The No. 9 Smoke Control Area was put before the Local Authority in 1968 but was deferred. It is hoped, however, that early in 1970 this area will again be considered and, if an Order is made, it will, with the proposed No. 11 Area, complete the entire link of areas on the west side of the City stretching from Avonmouth to Whitchurch and covering just over a quarter of the City.

During the course of the year 1,520 grant applications in the No. 8 Smoke Control Area have been dealt with and approved. From the applications received it is interesting to note that the swing to the "piped fuels" has continued, and the demand for appliances which will use solid smokeless fuels, even though still the most popular, has fallen off. The choice of adaptation in private dwellings has been, for solid fuel appliances 38·3%, for gas appliances 38·0%, electrical appliances 21·6% and oil 2·1%. The most surprising fact to come out of these figures, which

have taken into account room heaters and central heating systems, has been the low trend towards oil, and also the popularity of gas. These figures do indicate that people are taking full advantage of the generous grant arrangements which are available for gas appliances under Circular 51/65.

The policy of the Corporation's Housing Department throughout the No. 8 Smoke Control Area has been to take the opportunity, whilst carrying out works of adaptation in order to comply with the Smoke Control Order, of offering their tenants full central heating systems. This has resulted in 92.4% of all systems installed being for central heating by means of solid fuel or gas, and only 0.112% adaptations for inset fires.

Observations in the operative smoke control areas were again carried out, especially during the winter months, and it revealed a most satisfactory situation as far as smoke emission was concerned, there being no necessity for formal action. This situation is partially due to the active liaison between the fuel suppliers in the city and the inspectorate, and the new control provided by section 9 of the Clean Air Act, 1968. This section makes it an offence to acquire or to sell by retail for delivery in a smoke control area, any unauthorised fuel.

During the year three prosecutions were taken under section 16 of the 1956 Clean Air Act with respect to nuisances caused by the emission of smoke, and fines totalling £6.6.0 were imposed as well as orders made prohibiting their recurrence. One prosecution was taken under Section 1 of the 1956 Clean Air Act for the continuous emission of dark smoke from a chimney serving a steam raising plant. The Magistrates fined the company £8 with £2 costs.

In April 1969 section 1 of the 1968 Clean Air Act became operative. This section prohibits the emission of dark smoke from industrial or trade premises, otherwise than from a chimney, thus greatly improving the existing legislation where "nuisance to the inhabitants of the neighbourhood", must be proved, and now enables the burning of car bodies at established breaker's yards to be controlled. To ensure that the traders in the Bristol area were aware of these new powers, every known car breaker's yard and scrap metal dealer's premises were circulated with the relevant information. To date there has been no necessity to take any statutory action against these traders, although difficulty has been experienced by inspectors in trying to deal with the part-time scrap metal dealer who dumps and sets fire to his stock on a void site, then leaves it to burn out unattended, returning at a later date to collect his spoils. By this practice he is avoiding detection and makes it virtually impossible to place responsibility for any dark smoke contravention that arises.

The development of the Avonmouth/Sevenside area with large chemical and industrial plants after the post war era has created problems for the Department and this has been especially pronounced over the last twelve months. The Department has received continual complaints directed against the emission to atmosphere of pollutants from the industrial premises in this area. In most cases the responsibility for these premises falls to the Alkali Inspectorate, but the environmental conditions and the investigation of complaints has been a joint operation involving officers of this Department.

Occasionally breakdowns in plants occur and, although speedy remedial action is taken by the firm concerned, the amount of chemicals discharged to atmosphere can be considerable. An example of this happened in the latter part of 1969 when a quantity of arsenic solution was emitted due to plant failure at the Imperial Chemical Industries Ltd's Sevenside Works. A large number of samples were taken by this Inspectorate and subjected to analysis by the Scientific Adviser's Department.

At the present time this Department, in conjunction with the Ministry of Technology, has equipment measuring sulphur dioxide and smoke at three sites in the City. However, in order to provide a regular means of comparison with other parts of the country and a base line for future measurements in this rapidly expanding industrial area, it is hoped that improved monitoring facilities for atmospheric pollution will be set up in the coming year, involving the purchase of seven sets of semi-automatic equipment. It is anticipated that this will provide a clear picture as to the differing levels of pollution in contrasting types of areas, giving at the same time some indication as to the trends in levels of concentration. In addition it is hoped that the Department will have one set of portable apparatus which will be of use in the investigation of complaints of specific high levels of atmospheric pollution in localised areas.

NEW FURNACE AND BOILER PLANT

Notifications in respect of 94 boilers and furnaces were received in accordance with section 3(3) of the Clean Air Act 1956, and once again the trend of recent years towards the use of gas and oil has continued, there being no notification of appliances to be fired with solid fuel.

Of these notifications ten came within the scope of section 6 of the 1968 Clean Air Act which became operative on the 1st April, 1969. From that date it became necessary to obtain the approval of the Local Authority for the height of a chimney, (1) where it is intended to construct a new chimney, (2) where there is an addition to the combustion space of an existing furnace and (3) where a furnace is replaced by another having a larger combustion space, provided the furnace is used to burn pulverised fuel, solid matter at a rate of 100 lbs. or more per hour, or liquid or gaseous fuel at a rate equivalent to one and a quarter million British Thermal Units or more per hour.

Eight of the applications were approved, subject to maximum rates of sulphur dioxide emission. Two of the applications received were refused as in both cases we did not consider that the proposed chimney heights would be sufficient to disperse the products of combustion without giving rise to odour and nuisance in the locality. Both applicants were given written notification of the decision which stated the reasons for refusal, the lowest height the local authority were prepared to accept and the conditions which would be imposed.

One of the applicants subsequently re-applied conforming to the local authority's requirements and approval was subsequently granted. The other application has not yet been resolved.

The fears expressed when the 1968 Clean Air Act became operative as to the use of the term 'COMBUSTION SPACE' in subsection 10(c) which extends the application of section 6 to a furnace which replaces a furnace having a smaller combustion space, have been confirmed in the first nine months of operating this section. A case has arisen where in established premises previously served by one sectional oil fired boiler with a combustion space of 72 cu.ft., rated at 1.5 million Btu's/hr. and fired with 200 sec. Redwood No. 1 fuel oil, was replaced by two new boilers having a combined combustion space of 39.2 cu.ft., rated at 3.2 million Btu's/hr. and fired with 35 sec. gas oil. The smaller combustion space, although there was an overall increase in the maximum continuous rating, meant that an application under section 6 could not be required, and thus the height of the stack remained the same. In this case if the word 'CAPACITY' had been included in the legislation the local authority could have required an increase of 20 feet in the chimney height and therefore ensured the satisfactory dispersal of the products of combustion.

ADMINISTRATION OF THE OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963

The enforcement of this legislation is divided between the local authority and Her Majesty's Factory Inspectorate, the latter being responsible for offices and shops owned and occupied by the Crown, premises occupied by local authorities and factory offices and shops. The remainder are the responsibility of the local authority.

It will be remembered that whilst registration of premises was started in 1964 because of a shortage of public health inspectors in the Department, the Offices and Shops Section was not formed until the beginning of 1966. By this time, 6,582 employers had notified the Department of the employment of persons to work in their premises. It was obvious that a considerable number of occupiers still had not registered their premises and it was anticipated that the work of locating unregistered premises and making general inspections to assess full compliance with the requirements of the Act in an estimated 8,000 offices and shops in the City would take approximately four years. By the end of 1968, 5,917 premises had been the subject of a general inspection and it was realised during this time that a very high rate of interchange of occupation of premises was taking place, necessitating new registrations and making existing ones obsolete. Apart from the normal flow of industry and commerce in and out of the city, and to and from larger or smaller premises, there were the changes brought about by the continued redevelopment of the central areas of the City and, in more recent months, the reduction of shipping using the City Docks and the changing nature of traffic in Avonmouth Docks.

During the year, the inspectors carried out 1,305 general inspections and, in addition, made 4,561 other visits, which were mainly concerned with ensuring that contraventions did not persist, dealing with complaints, investigating accidents and giving technical advice and guidance to occupiers and others when requested. Of the 1,305 general inspections, 572 were premises visited for the first time and represented the conclusion of the four year programme commenced in 1966. The remaining 733 visits were the commencement of a second cycle of inspections. As anticipated, the programme of initial general inspection of all known offices and shops had been completed some four or five months ahead of the four year schedule. In the course of that survey 6,489

premises had been inspected, of which 2,257 were offices, 3,350 retail shops, 471 wholesale shops and warehouses, 410 catering establishments and 1 fuel storage depot.

On the 28th May, 1969, the Offices, Shops and Railway Premises (Hoists and Lifts) Regulations, 1968 came into operation and imposed requirements with regard to the construction, maintenance and examination of lifts. They also required in certain instances liftways to be enclosed and gates to be provided, fitted with devices to secure that the gates could not be opened unless a lift was at a landing, and that a lift could not be moved away from a landing until the gates were closed.

In view of the coming into operation of these regulations and in anticipation of the making of similar regulations controlling the construction, maintenance and use of ladders, and also regulations controlling the distribution and use of electrical energy in offices and shops, it is intended, for the time being, to continue to carry out the general inspection of the premises, area by area, as has been done during the last four years.

As was to be expected, absence of handrails to staircases, unsuitable sanitary conveniences, absence of supplies of running hot or warm water to washing facilities, dirty premises, inadequate ventilation and, more recently, defective lifts are still the most common contraventions found.

Although it was not necessary to write as many letters as hitherto reminding owners and occupiers of deficiencies found in their premises, there were still far too many contraventions existing at times of inspection. On the other hand, once reminded of contraventions, offenders seemed to realise rather more quickly that the only statutory action that the Local Authority could take was to refer the non-compliance with requirements of the Act to the Courts. It was necessary to take proceedings before the Magistrates only once during the year. This concerned a newsagent and tobacconist who was convicted of failing to keep part of his premises clean and having a sanitary convenience so situated that it was entered directly from a workroom. He was fined £5 on each charge and ordered to pay £33.0 costs.

In view of the great variety of circumstances affecting premises within the scope of this Act, powers of exemption are provided to give a reasonable degree of flexibility in enforcing certain requirements, for example room space for employees, temperature, provision of sanitary conveniences and running water for washing facilities. The Secretary of State for Employment and Productivity may exempt any class of premises from these requirements and did so in one instance in 1969. The local authority may also grant exemption for a limited period, to the occupier of any specific premises both from these requirements and, where a proper first-aid room is provided, from the obligation to maintain separate first-aid boxes, each in the charge of a responsible person or trained first aider. There were three applications for exemption from the first-aid requirements where adequate arrangements had been made for treatment of personnel in such a room, one from the occupier of a large office organization, another from a gas undertaking and the third from a large firm of builders' merchants. In each case a certificate of exemption was granted. The transfer of certain functions of the Postmaster General to the Post Office Corporation was effected on the 1st October 1969 by the Post Office Act 1969. As a result the Offices, Shops and Railway Premises Act 1963 (Exemption No. 8) Order 1969 has exempted telephone switchrooms, where the whole of the switching apparatus is manually operated and which are situated in public telephone exchanges, from the space requirements of the Act until 31st December 1970.

The value of seeking the advice and guidance of the Department at the planning stage has again been demonstrated. In a number of instances occupiers' proposals for the creation of inner offices with no natural lighting or ventilation, the setting up of open offices in wholly underground rooms or the use of offices to the point of near over-crowding, were met with strong recommendations against the proposals on grounds other than the possibility of contraventions arising. Adoption of alternative proposals was sometimes accompanied by expressions of thanks from the occupiers for having helped them to a better understanding of their problems.

During the year, 220 accidents were notified, compared with 162 notifications in 1968. Of these, 85 concerned women, 109 men, 12 girls and 14 boys, and the largest number, 79, occurred in retail shops with 78 occurring in warehouses. The increase can partly be explained by the increase in the number of notifications in connection with circumstances upon investigation of which it was questionable whether the description of "an accident" was justified. On the other hand, the need for more searching enquiry at the time of a general inspection in order to ascertain whether accidents have occurred but have not been notified, seems to be indicated. One accident demonstrated the need for care and attention by an occupier when employees of another organisation are working on his premises. An employee of one public undertaking had dug a large hole in a disused office. He was temporarily away from the scene of operations when the occupier's deputy foreman was conducting the employee of a second public undertaking around the premises.

The foreman was called away to the telephone and returned to find the second public undertaking's employee had fallen down the hole, fortunately without serious injury.

THE ADMINISTRATION OF THE SHOPS ACTS AND KINDRED LEGISLATION

In addition to being responsible for the enforcement of the Offices, Shops and Railway Premises Act 1963, the Shops Inspectors have continued to discharge their functions in connection with the Shops Acts and kindred legislation.

As usual, the Bristol Flower Show was held at Durdham Downs in September and the Social Services Committee granted an exemption from the general closing hours requirement of the Shops Act. An Ideal Home and Trades Exhibition was held at the Victoria Rooms during August for which a similar exemption was granted. One other trade exhibition was held at the Victoria Rooms, namely the Antiques Fair, in November. No exemption was required as the hours of trading complied with the Act.

After long consideration, the Queen's Road and Park Street Traders' Association made application for this shopping centre to be brought in line with the Broadmead Shopping Centre with regard to six day trading. Exemption from the early closing day provisions of the Act was granted for the majority of trades in the area, a similar exemption also being granted to pet shops in the Victoria Street area.

Few complaints have been received during the year regarding closing hours and most of those received have been resolved when the attention of the occupier has been drawn to the requirements of the Act. In one instance compliance was obtained only when legal proceedings were imminent.

Records of young persons' employment continue to be inspected, but no serious contraventions have been revealed in respect of hours employed or the keeping of records.

A talk was given to Overseas Labour Officers on the subject of the administration of the Shops Act and the Offices, Shops and Railway Premises Act, at the request of the Department of Employment and Productivity. The officers concerned were from Malaysia, Ghana and Trinidad and Tobago.

The Annual Conference of the Institute of Shops Acts Administration was held at Hastings in September and was attended by the Specialist Inspector—Shops, Mr. K. C. Holden.

RAT DESTRUCTION

DISINFESTATION AND DISINFECTION

As can be seen from Table 24 the number of complaints of rats and mice show a marked increase on previous years. In fact a total of 4,994 were received, more than in any year since records have been kept. These notifications were made as required by Part 1, Section 2 of the Prevention of Damage by Pests Act, 1949, which places an obligation upon occupiers of premises to notify the Local Authority if they become aware that their premises are infested with rats or mice in substantial numbers.

Although for one period of the year the rodent control staff was depleted, the practice of visiting all premises in respect of which a complaint was made has been maintained. An increase has been noted in the number of complaints received in respect of premises which were under contract to private servicing companies where the treatment was considered by the occupier to be unsatisfactory. In many cases, additional or different treatment was suggested, but in some, we were requested to undertake treatment.

Complainants have been informed when it was considered that the infestation originated through their default and advice on the proofing of buildings was given when necessary.

ROUTINE INSPECTIONS AND TREATMENT

It was hoped to recommence the routine inspection of business premises but this was not possible because of the unprecedented increase in the volume of work. The inability to carry out these routine inspections is reflected in the number of complaints involving business premises, especially foodstores, where infestations were previously detected in the very early stages. When staff replacements have been completed it is hoped to resume this very much appreciated service.

Although many derelict areas of the city have been redeveloped, other sites have been created by demolition for future redevelopment. All sites have been regularly inspected and treated when-

ever necessary, as also have void premises awaiting demolition. Every effort has been made to carry out preventive treatment where void property is likely to remain standing for some time before demolition. Defective drainage systems continue to be considered as the source of some of the surface infestations. Defects need not necessarily be recent as a defective drain may remain undetected for years until an inquisitive rat attempts to find another exit from the drain.

PORT OF BRISTOL AUTHORITY AREA

The regular visits paid to business premises forms the major part of the work within the dock area, where four specialised operators concentrate on providing an efficient cover for all classes of premises. The increasing travelling time necessary to cover the rapidly developing areas of Chittening and Severnside is presenting difficulties in maintaining the desirable frequency of inspection.

SEWER TREATMENT

The sewers of the city continue to be subjected to the usual form of treatment that is now being referred to as the "Bristol" standard, where sewer treatment is being carried out, somewhere in the city every working day. It is interesting to record that during the year $2\frac{1}{2}$ tons of poisoned bait has been laid in the city's sewers and, the sewer treatment group and their vehicle covered some 10,996 miles.

OTHER PESTS

The 570 wasp nests dealt with during the year was again considered to be low, although the season appeared to be longer. The practice of dealing with wasp nests during the evening when the wasps had returned was very effective and proved to be safer for the operators.

Complaints continued to be received regarding foxes, squirrels and moles but no action, other than giving advice, can be taken by the Department. Consultations between the local authority and the Ministry of Agriculture, Fisheries and Food have established that neither has the power to take action in such cases.

Pigeon complaints continued to be received in increasing numbers but little help could be offered, for, as at the close of 1968, a Committee decision is still awaited on the subject of pigeon control.

GENERAL

The pressure of work on the section was greatly increased during October due to the labour dispute involving the refuse collectors. As a result of the strike over 130 temporary tipping sites were created throughout the city for the reception of household refuse. It was decided that treatment of these sites should be given the utmost priority as a preventive measure and to this end over 1,000 visits were made whilst the sites were being used. This preventive measure had the desired effect, as only two complaints were substantiated regarding rats in refuse deposited on these sites.

Concern has been felt during the year at the great increase in the number of rat complaints and the continued high level of mouse infestations. The reasons for these appear to be different in one respect yet similar in another. The increase in rat infestations is due to an increase in breeding potential that comes about naturally in irregular cycles, and this was a problem which was expected at the beginning of the year. The mouse problem is that of the continuing inability to control infestations by means of the standard Warfarin rodenticide. This problem was fully detailed in last year's Annual Report.

The similarity of both cases is that the public generally are becoming increasingly aware of the dangers inherent in infestations of rats and mice, both with regard to disease and to structural damage. This is an awareness that can only be welcomed and something that has taken years to achieve.

It could be said that 1969 was a frustrating year with Warfarin resistance proving to be a continuing problem. Perhaps it is some consolation to consider what the situation would be like if we had not continued our policy of never reducing the standard of treatment and always striving for total elimination, total elimination being the only goal.

DISINFECTION AND DISINFESTATION

This service has maintained its very valuable contribution to the work of the Environmental Services Division and the usual disinfection and disinfestation work has been carried out in a very wide range of premises including some ships.

Once again the staff of this section were called upon to deal with an emergency situation, this year the dustmen's strike. Daily visits were made to all the emergency tipping sites in the city

and spraying carried out. This obviously caused a great deal of extra work and necessitated the working of many hours of overtime.

TABLE 1
ENVIRONMENTAL HEALTH INSPECTIONS (ALL LEGISLATION)

Complaints and enquiries received: 10,069

<i>Visits :</i>	<i>Visits</i>	<i>Revisits</i>	<i>Total</i>
Dwelling houses (Public Health)	6,721	14,371	21,092
Dwelling houses (Housing)	2,860	4,875	7,735
Multiple occupation	305	1,083	1,388
Common lodging houses	1	4	5
Factories—power	560	804	1,364
Factories—non-power	40	22	62
Outworkers	29	28	57
National Assistance Act, 1948	8	38	46
Nurseries/homes, etc.	34	39	73
Entertainment places	212	244	456
Moveable dwellings	152	578	730
Sites	644	2,064	2,708
Building sites	120	243	363
Injurious weeds	17	35	52
Offensive trades	71	5	76
Keeping of animals	57	149	206
Piggeries	171	1	172
Poultry	29	2	31
Pet shops	89	35	124
Noise	428	1,804	2,232
Smoke observations	602	1,828	2,430
Smoke Control Area visits	2,397	2,523	4,920
Chimney height visits	966	91	1,057
Inspection of boiler plant and furnaces	3,512	117	3,629
Dust and effluvia	255	839	1,094
Health education	99	74	173
Court attendance	71	21	92
Flooding	178	40	218
All other matters	1,956	3,032	4,988
Food premises—registrable	586	1,298	1,884
Food premises—non-registrable	2,657	4,892	7,549
Food vehicles/stalls	1,305	662	1,967
Butchers' Shops	580	114	694
Meat markets	475	2	477
School kitchens	139	153	292
Cold stores	89	1	90
Food inspection	1,950	478	2,428
Dairies	35	25	60
Ice cream manufacturers	16	11	27
Pharmacy and poisons	228	22	250
Rag flock	28	5	33
Sampling	2,164	83	2,247
Infectious disease	101	149	250
Dysentery	510	791	1,301
Food poisoning	208	344	552
Food complaints	711	611	1,322
Offices	382	14	396
Retail shops	690	23	713
Wholesale shops and warehouses	103	3	106
Catering establishments and canteens	63	6	69
Fuel storage depots	—	—	—
Other visits L.A. Circ. 5 para. 7	2,889	1,544	4,433
Sunday Entertainment Act	21	1	22
Young Persons (Employment) Acts	12	—	12
Shops Acts (retail)	1,544	111	1,655
Shops Acts (wholesale)	48	3	51
Totals ...	40,118	46,335	86,453

TABLE 2
SUMMARY OF NOTICES SERVED (Excluding Housing Legislation)

				<i>Informal</i>		<i>Statutory</i>	
				<i>Served</i>	<i>Complied with</i>	<i>Served</i>	<i>Complied with</i>
Dwelling houses (public health)	...	...	...	303	297	172	146
Multiple occupation	...	...	...	37	17	14	5
Common lodging houses	...	...	...	—	—	—	—
Factories—power	...	...	...	25	21	—	—
Factories—non-power	...	...	...	1	—	—	—
Outworkers	...	...	...	—	—	—	—
Nurseries/homes, etc.	...	...	...	—	—	—	—
Entertainment places	...	...	...	—	—	—	—
Sites	...	...	...	3	2	—	—
Building sites	...	...	...	2	1	—	—
Injurious weeds ..	...	...	...	1	—	—	—
Keeping of animals	...	...	...	1	—	—	—
Noise	...	...	...	—	—	—	—
Smoke observations	...	...	...	3	N/A	—	—
Dust and effluvia	...	...	...	11	—	1	—
All other matters	...	...	...	1	3	—	1
Food premises—registrable	...	...	...	19	23	—	—
Food premises—non-registrable	...	...	...	173	232	2	1
Food vehicles/stalls	...	...	...	30	24	—	—
Butchers' shops	...	...	...	13	21	—	—
Meat markets	...	...	...	—	—	—	—
Cold stores	...	...	...	—	—	—	—
Dairies ..	...	...	...	—	—	—	—
Ice-cream manufacturers	...	...	...	—	—	—	—
Rag flock	...	...	...	—	—	—	—
Offices	...	...	...	141	87	—	—
Retail shops	...	...	...	362	291	—	—
Wholesale shops and warehouses	...	...	...	42	62	—	—
Catering establishments and canteens	...	...	...	53	34	—	—
Fuel storage depots	...	...	...	—	—	—	—
Sunday Entertainment Act	...	...	...	—	—	—	—
Young Persons (Employment) Acts	...	...	...	—	—	—	—
Shops Acts (retail)	...	...	...	16	—	—	—
Shops Acts (wholesale) ..	...	...	...	2	—	—	—
Totals	...	...	...	1,239	1,115	189	153

TABLE 3
SUMMARY OF REMEDIAL ACTION (Excluding Housing Legislation)

<i>Public Health</i>				
New drains laid	...	...	...	12
Drains repaired	...	...	...	203
Choked drains cleared	...	...	...	1,601
Tests made	...	...	...	86
Repairs/improvements to sanitary accommodation	...	...	...	90
Additional sanitary accommodation provided ..	...	...	...	10
Intervening vent. space provided	...	...	...	—
Cesspools abolished	...	...	...	1
New and additional water supplies	...	...	...	2
Hot water installed	...	...	...	2
New/additional sinks provided	...	...	...	—
Wash basins provided	...	...	...	3
Roofs repaired	...	...	...	137
Dampness remedied	...	...	...	137
Other new and repair works	...	...	...	289
Yards paved and drained	...	...	...	5
Other nuisances abated	...	...	...	116
Houses cleansed/fumigated	...	...	...	141

TABLE 3—continued

Food store installed	—
Cooking facilities provided	—
Lighting improved	1
Ventilation improved	1
Heating provided	—
Overcrowding abated	1
Exhumations	2
Keeping of animals—improvements	1
<i>Aged and Infirm Persons</i>	
Removals—voluntary	1
Removals—court order	—
Smoke infringements dealt with	53
Noise nuisance dealt with	97
All other matters	708
<i>Food Hygiene</i>	
Premises altered/repaired	92
Premises decorated/cleansed	190
Hot water provided	69
Sinks provided	15
Wash hand basins provided	28
Sanitary accommodation provided	1
Sanitary accommodation improved	51
Personal requirements dealt with	26
Equipment improved/replaced	61
Contamination risk reduced	13
First aid provisions	26
Lighting improved	1
Refuse storage improved	18
Stalls/vehicles improved	6
Food transport improved	2
Ventilation improved	12
All other matters	101
<i>Offices and Shops</i>	
Premises cleaned/redecorated	51
Heating provided/improved	1
Ventilation improved	61
Lighting improved	31
Sanitary accommodation improved	93
Sanitary accommodation provided	3
Washing facilities improved	44
Washing facilities provided	32
Seats provided	12
Eating facilities provided/improved	3
Floors, passages, stairs repaired	46
Machinery fenced	62
Other safety measures provided	90
First aid provisions	279
All other matters	669

TABLE 4

PROSECUTIONS AND COURT APPEARANCES

Under the Public Health Act, 1936

Section 94	Various nuisances arising from structural defects.	21-day Nuisance Order made and ordered to pay £5 costs.
Section 94	Various nuisances arising from structural defects.	Works completed. Fined £5 for failure to comply with statutory notice.
Section 94	Nuisance arising from leaking main roof.	Works completed. Fined £5 for failure to comply with statutory notice.
Section 94	Various nuisances arising from structural defects.	Works completed. Fined £5 for failure to comply with statutory notice.
Section 94	Various nuisances arising from structural defects.	Work completed, ordered to pay £5 expenses.
Section 94	Application for costs with regard to statutory nuisances at 3 properties.	Ordered to pay £3 costs.
Section 94	Various nuisances arising from structural defects.	7-day Nuisance Order made.
Section 94	Various nuisances arising from structural defects.	Ordered to pay £3 costs.
Section 94	Various nuisances arising from structural defects.	28-day Nuisance Order made.

Under the Housing Act, 1957

Section 27(1)	Contravention of Closing Order (Occupier).	Given unconditional discharge.
Section 27(1)	Contravention of Closing Order (Occupier).	Given unconditional discharge.

Under the Food and Drugs Act, 1955

Section 2	Mouldy steak and kidney pie.	Manager fined £10.—Company satisfied Court that they had taken all practicable steps to ensure a wholesome product.
Section 2	Mouldy beef sausages.	Fined £30.
Section 2	Cigarette end in loaf of bread.	Fined £5.
Section 2	Bright metal disc in a currant loaf.	Fined £15.
Section 2	Pin in large sandwich loaf.	Fined £15.
Section 2	Part of fingernail in custard tart.	Fined £15.
Section 2	Piece of plastic in loaf of bread.	Fined £20.
Section 2	Piece of wood in tin of steak and kidney pudding.	Fined £20.
Section 2	Adulterated whisky.	Fined £10 and ordered to pay £2 costs.
Section 2	Wire in fruit crisp biscuit.	Fined £25.
Section 2	Foreign body in beef steak and kidney pie.	Fined £20.
Section 2	Bees in tin of red plums.	Fined £25.
Section 2	Wood louse in cheese pasty.	Fined £20 and ordered to pay £2 costs.
Section 2	Mould in wrapped sliced loaf of brown bread.	Fined £20 and ordered to pay £2 costs.
Section 2	Cigarette end in loaf of bread.	Fined £15 and ordered to pay £3 costs.

Under the Food Hygiene (General) Regulations, 1960

Regs. 6(1); 14(2); 14(5); 16(3); 23(1); 24.	Dirty equipment and fittings; dirty sanitary convenience; no nailbrush to wash hand basin; walls, floor and ceiling of kitchen dirty and coated with grease; accumulation of refuse in food room.	Each of three partners fined £16 and ordered to pay £2 costs.
Regs. 6; 14; 19; 23.	Walls, floors and ceilings of food rooms not clean and in good repair; dirty equipment and fittings; no hot water to sink for washing equipment; room containing the sanitary convenience dirty.	5 charges dismissed. Fined £3 on each of 8 charges. Magistrates warned that further contraventions of these Regulations will result in imprisonment. Suspended prison sentence for failure to pay fines imposed at a previous hearing and sentence will become operative if defendant fails to pay fines currently at rate of £1 per week.
Reg. 6(1).	Wooden trays in Bakery in dirty condition.	Fined £5 and ordered to pay £3 costs.

Under the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966 as amended

Regs. 15; 17; 18(a).	No water supply; no first aid kit and no sink for the washing of equipment.	Fined £5 on each of 3 counts and ordered to pay £5 costs.
Regs. 9; 13(1)(a); 16(2); 17; 18(b).	Food handler not wearing clean washable clothing; no name and address on vehicle; no supply of hot water to wash hand basin or to equipment sink.	Fined £3 on each of 5 counts and ordered to pay £2 costs.
Regs. 5(1); 6(1); 13(1); 16(2); 16(3); 17; 18(1).	Dirty van and equipment; no name and address on vehicle; no hot water, nailbrush or towel to wash hand basin; no first aid kit; no sink for washing equipment.	Fined £2 on each of 15 counts and ordered to pay £5 costs.
Regs. 5(1); 13(1)(a); 16(1)(2) and (3); 17; 20.	Dirty floor of ice-cream van; no name and address displayed; no hand washing facilities; no first aid kit and accumulation of refuse in vehicle.	Fined a total of £35.
Reg. 5(1)	Stale bread crumbs, flour and dust on floor of delivery vehicle.	Granted an absolute discharge.
Regs. 5(1); 16(2).	Dirty floor of ice cream van; no supply of hot water to wash hand basin.	Fined a total of £15.
Reg. 7(a).	Food so placed as to involve a risk of contamination.	Fined £4.
Reg. 5(1).	Dirty floor and fittings to ice-cream vehicle.	Fined £10.
Reg. 13(1) (b).	Address at which vehicle garaged not displayed.	Case not proved.
Reg. 5(1).	Floor and fittings of delivery vehicle dirty.	Fined £10.
Regs. 16(2) and (3); 17.	No hot water or nail brush to wash hand basin; no first aid kit.	Fined a total of £10.
Reg. 16(2).	No hot water to wash hand basin.	Fined £5.
Reg. 5(1).	Dirty floor of delivery vehicle.	Case dismissed.
Regs. 5(1); 7(a); 13(1) (a).	Dirty floor of delivery vehicle; food exposed to risk of contamination; no name and address displayed.	Case dismissed.
Regs. 16; 17.	No hand washing facilities; no first aid kit.	Fined a total of £10.
Reg. 5(1).	Dirty floor and fittings of ice-cream van.	Fined £10.

Reg. 5(1).	Fish and chip vehicle dirty and unable to be effectively cleaned.	Owner fined £3. Driver fined £2.
Regs. 13(1)(a); 17.	No name and address displayed; inadequate first aid kit.	Fined £2.
Reg. 13(1)(a).	No name and address on hot dog stall.	Fined £1.
Regs. 5(1); 7(a).	Dirty floor of delivery vehicle; food so placed as to involve risk of contamination.	Owner fined £5 and ordered to pay £3 costs. Driver fined £5.
Regs. 6(1); 13(1)(a); 15; 16(3).	Dirty ice cream servers; no name and address displayed; no water supply or clean towel.	Fined a total of £5.
Regs. 5(1); 6(1); 8(e); 13(1)(a).	Dirty floor of vehicle and dirty equipment; food handler smoking; no name and address displayed.	Owner fined £20 and ordered to pay £5 costs. Driver fined £10.
Regs. 16(2); 18(b).	No hot water to wash hand basin and equipment sink.	Fined £2.
Regs. 16(2); 17; 18(b).	No hot water to wash hand basin and equipment sink; inadequate first aid kit.	Fined £4.
Regs. 5(1); (13(1)(a).	Dirty floor of vehicle; no name and address displayed.	Fined £11 and ordered to pay £2 costs.
Regs. 16(1); 17.	Absence of wash hand basin and first aid kit on vehicle.	Fined £10 and ordered to pay £2 costs.
Reg. 8(a).	Food handler with dirty hands.	Fined £5.
Reg. 5(1).	Dirty floor and fittings to vehicle.	Owner: fined £10 and ordered to pay £2 costs. Driver: fined £2.
Reg. 5(1).	Dirty floor of vehicle.	Owner fined £10.
Regs. 5(1); 7(a).	As above plus cakes not protected from risk of contamination.	Driver fined £2 on each count.
Regs. 16(2)(3); 17.	Absence of hot water and nail brush to wash hand basin; absence of first aid kit.	Owner fined £9 and ordered to pay £3 costs. Driver: absolute discharge.
Regs. 16(2)(3)(4); 17.	Absence of hot water, soap, towel and nail-brush to wash hand basin; dirty wash hand basin; absence of first aid kit.	Owners: fined £30 and ordered to pay £3 costs. Driver: fined £12.

Under the Milk and Dairies (General) Regulations 1959

Reg. 27(1).	Piece of glass in bottle of milk.	Fined £10 and ordered to pay £2 costs.
Reg. 27(1).	Foreign body in bottle of milk.	Fined £10 and ordered to pay £2 costs.
Reg. 27(1).	Glass in bottle of milk.	Fined £15 and ordered to pay £2 costs.
Reg. 27(1).	Particles of dirt in bottle of milk	Fined £15 and ordered to pay

Under the Clean Air Act, 1956

Section 16	Nuisance arising from the burning of car bodies	Nuisance Order made prohibiting the recurrence of the nuisance. Ordered to pay 2 gns. costs.
Section 16	Nuisance arising from the burning of car bodies	Nuisance Order made prohibiting the recurrence of the nuisance. Orders to pay 2 gns. costs.

Section 16	Nuisance arising from the burning of car bodies	Nuisance Order made prohibiting the recurrence of the nuisance. Orders to pay 2 gns. costs.
Section 1(1)	Emission of dark smoke for continuous period of 20 minutes	Fined £8 and ordered to pay £2 costs.

Under the Factories Act, 1961

Section 7	Absence of intervening ventilated space between the room containing a sanitary convenience and a workroom in contravention of the Sanitary Accommodation Regulations 1938.	Fined £5 and ordered to pay £2 costs.
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Under the Offices, Shops and Railway Premises Act, 1963

Sections 4(1); 9(1)	Parts of shop premises not clean; room containing the water closet communicates directly with a workroom in contravention of the Sanitary Accommodation Regulations 1964.	Fined £4 and ordered to pay £3.3.0 costs.
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TABLE 5

FACTORIES ACT, 1961

Prescribed Particulars on the Administration of the Factories Act, 1961

PART I OF THE ACT

1. Inspections for purposes of provisions as to health (including inspections made by Public Health Inspectors).

<i>Premises</i> (1)	<i>Number on Register</i> (2)	<i>Number of</i>		
		<i>Inspections</i> (3)	<i>Written Notices</i> (4)	<i>Occupiers Prosecuted</i> (5)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	40	62	1	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	1,636	1,402	27	1
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises) ...	161	363	2	—
Total ...	1,837	1,827	30	1

2. Cases in which defects were found.

<i>Particulars</i> (1)	<i>Number of cases in which defects were found</i>				<i>No. of cases in which prosecutions were instituted</i> (6)
	<i>Found</i> (2)	<i>Remedied</i> (3)	<i>Referred to H.M. Inspector</i> (4)	<i>by H.M. Inspector</i> (5)	
Want of cleanliness (S. 1) ...	16	2	—	1	—
Overcrowding (S. 2)	—	—	—	—	—
Unreasonable temperature (S. 3) ...	—	1	—	—	—
Inadequate ventilation (S. 4) ...	13	7	—	—	1
Ineffective drainage of floors (S. 6) ...	—	—	—	—	—
Sanitary conveniences (S. 7):					
(a) Insufficient	19	22	—	1	—
(b) Unsuitable or defective ...	67	68	3	5	—
(c) Not separate for sexes ...	—	—	—	—	—
Other offences against the Act (not including offences relating to Outwork)	12	6	—	—	—
Total ...	127	106	3	7	1

TABLE 6

FACTORIES ACT, 1961—PART VIII OF THE ACT—OUTWORK
(Sections 133 and 134)

Nature of work (1)	Section 133			Section 134		
	No. of outworkers in August list required by Section 133 (1) (c) (2)	No. of cases of default in sending lists to the Council (3)	No. of prosecutions for failure to supply lists (4)	No. of instances of work in unwholesome premises (5)	Notices served (6)	Prosecutions (7)
Wearing Apparel } Making, etc.	81	—	—	—	—	—
Cleaning and Washing	—	—	—	—	—	—
Furniture and Upholstery	2	—	—	—	—	—
Stuffed toys	3	—	—	—	—	—
Textile weaving	1	—	—	—	—	—
Total	87	—	—	—	—	—

In addition to the above, outworkers are also involved in the following occupations:

Occupation	No. of o/w's	Occupation	No. of o/w's
Painting Dolls	...	Crotcheting ..	...
Christmas Card preparation	4	Embroidery ..	1
and packet labelling	...	Fabric/Machinery	...
Handicrafts	1	Rug Making ..	1
Rosettes	6	Sorting stamps	3
Leatherwork	2	Decorating pots	1
Dolls Clothing	2		1
	3		—
		Total	26

TABLE 7

HOUSING PROGRESS CHART

			<i>From 1961– May 1965</i>	<i>1966</i>	<i>1967</i>	<i>1968</i>	<i>1969</i>
			<i>1955– 1960</i>				
Houses in Clearance Areas and already covered by operative Clearance Orders or Compulsory Purchase Orders	Pre-war 138 Post-war up to 5.5.55 73	} 211	113 72	19 —	1 —	— —	— —
Houses in Clearance Areas for which Clearance Orders or Compulsory Purchase Orders have been submitted to the Minister but have not yet become operative	Post-war up to 5.5.55	{ 56	56	—	—	—	—
Number of houses subject to operative Demolition Orders	Pre-war up to 5.5.55	{ 258	201	27	—	—	12
Totals ...			442	46	1	—	12
Houses represented—Clearance Areas			3,592	746	13	64	46
Reported to Committee			—	425	6	10	16
Demolition Orders made on individual houses ...			157	27	2	10	6
Certificates of Unfitness—houses owned by Corporation			510	196	21	23	24
Undertakings given by owners to demolish ...			114	74	3	7	2
Unfit houses voluntarily demolished by Corporation and others			229	256	25	39	80
Grand Totals ...			5,044	1,770	71	153	174
							186

TABLE 8

ACTION UNDER HOUSING LEGISLATION

<i>Houses inspected</i>	1967	1968	1969
Section 9	—	—	1
Section 16	73	72	86
Section 18	25	27	93
Clearance Areas	69	71	—
For Report to Committee	23	31	61
Multiple occupation	1	2	3
Totals ...	191	203	244
<i>Represented to Committee</i>			
Section 9	—	—	1
Section 16	73	80	62
Section 18	27	40	83
Clearance Areas	13	6	1
Reported to Committee as unfit	16	16	—
Reported to Committee—in multiple occupation	1	2	3
<i>Orders made</i>			
Demolition Orders—(Section 17, Housing Act, 1957) ...	10	6	9
Closing Orders—Whole House (Section 17, Housing Act, 1957)	52	54	49
Closing Orders—Whole House (Section 17 ss.3. Housing Act, 1957)	—	—	—
Closing Orders—Underground Rooms and parts of buildings (Section 18, Housing Act, 1957)	24	25	63
Management Orders (Section 12, Housing Act, 1961) ...	—	1	—
Direction Orders (Section 19, Housing Act, 1961) ..	—	—	—
Undertakings not to use—(Section 16, Housing Act, 1957)	6	2	7
Undertakings to demolish—Housing Act, 1957	6	2	5
Demolition Order substituted for a Closing Order (Section 28, Housing Act, 1957)	1	—	1
<i>Houses repaired</i>			
Section 9—informal ..	—	—	—
Section 9—formal	—	—	—
Section 9—formal by Corporation in default	—	—	—
Undertakings to repair	4	3	6
Undertakings not to use, cancelled after repair	—	3	—
Other repairs	—	—	—
Closing Orders determined after repair—whole building ...	28	32	44
part building ...	9	18	18
Demolition Orders revoked	—	—	—

TABLE 9

RENT ACT, 1957

Applications for certificates of disrepair	2
Refusals to issue certificates of disrepair	—
Certificates of disrepair issued—Full	—
Certificates of disrepair issued—Part	—
Undertakings given by landlords—Accepted	—
Undertakings given by landlords—Refused	—
Certificates of disrepair cancelled	—
Certificates as to remedying of defects	—
Refusal to cancel certificates of disrepair	4

TABLE 10

FOOD HYGIENE (GENERAL) REGULATIONS, 1960

(Summary of food premises subject to the Regulations grouped in categories of trade carried on in them)

<i>Trade</i>	<i>Number of Premises</i>
Restaurants and Cafes	358
Public Houses	481
Hotels—Boarding Houses	116
Clubs—places of entertainment	76
Fried Fish shops	113
Wet Fish shops	57
Grocers	722
Greengrocers	257
Supermarkets	81
Factory canteens	174
Wholesale food premises	57
Chemists	128
School Canteens	155
Flour and Sugar confectionery	612
Bakers	86
Butchers	196
Dairies (processing)	7
Ice-Cream manufacturers	7
Meat Products manufacturers	12
Other manufacturers (shell fish, etc.)	21

TABLE 11

SUMMARY OF TOTAL FOOD CONDEMNED

	<i>Tons</i>	<i>Cwts.</i>	<i>Qrs.</i>	<i>Lbs.</i>	<i>Cans</i>
Meat and offal	129	16	3	20	—
Meat (canned)	7	18	0	14	6,831
Fish	2	3	0	0	—
Fish (canned)	—	11	1	3	2,224
Poultry	1	10	1	9	—
Fruit and vegetables	34	1	3	11	—
Fruit and vegetables (canned)	38	4	3	4	44,258
Fruit (dried)	—	3	2	2	—
Other foods	15	16	3	17	—
Other foods (canned)	3	6	3	9	5,770
Totals	233	13	2	5	59,083

TABLE 12

TOTAL ANIMALS SLAUGHTERED

	1967	1968	1969	Percentage
Cattle	15,732	15,091	14,019	— 7·10
Calves	1,869	1,032	625	—39·45
Sheep	36,138	42,861	34,084	—20·48
Pigs	16,043	17,469	17,765	+ 1·69
Pigs (Bacon Factory) ...	14,113	18,509	19,990	+ 8·00
Goats	3	7	8	+14·29
Totals ...	83,898	94,969	86,491	— 8·93

TABLE 13

SAMPLES OF MEAT AND OFFAL FROM PET SHOPS

(a) <i>Horse Flesh</i>						<i>Number</i>	<i>Salmonellae</i>	<i>Percentage</i>
<i>Sample of</i>								
Meat						18	—	—
Liver						11	—	—
Heart						9	—	—
Kidney						1	—	—
Spleen						1	—	—
Totals ...						40	—	—
(b) <i>Knacker Meat</i>								
Meat						37	7	18·92
Liver						29	2	6·90
Heart						10	1	10·00
Kidney						14	1	7·13
Tongue						10	1	10·00
Spleen						3	1	33·33
Veal						11	1	9·09
Pork						2	—	—
Totals ...						116	14	12·06
(c) <i>Kangaroo Meat</i>						13	3	23·08
Cooked Knacker Meat ..						6	1	16·66
Cooked Knacker Liver ...						2	—	—
Totals ...						21	4	19·05
(d) <i>Miscellaneous Samples</i>								
Pig Mesenteric Glands ...						355	8	2·25
Pig Liver						36	2	5·56
Totals ...						391	10	2·56

TABLE 14

SAMPLES OF MEAT AND OFFAL FROM BUTCHERS' SHOPS/MEAT DEPOTS

<i>Origin</i>	<i>Butchers' Shops and Meat Depots</i>				<i>Salmonellae</i>	<i>Percentage</i>
Beef—English	31	—	—
Beef—Irish	14	1	7·14
Beef—Argentine	13	—	—
Pork—Irish	5	—	—
Minced Beef	15	—	—
Pork—English	40	—	—
Veal—English	4	—	—
Lamb—New Zealand	5	—	—
Total ...				127	1	0·79
<hr/>						
Sewer swabs from slaughterhouse—						
number submitted	104	26	25·00
Samples of bedding from cattle lairs—						
number submitted	41	1	2·44

TABLE 15

PIG AND POULTRY KEEPERS

<i>Number</i>		<i>Use</i>	<i>Licensed to boil swill</i>		<i>Visits</i>	
<i>1968</i>	<i>1969</i>		<i>1968</i>	<i>1969</i>	<i>1968</i>	<i>1969</i>
9	13	Keeping pigs only	9	8	—	—
25	16	Keeping pigs and poultry	21	14	—	—
20	13	Keeping poultry only	3	3	—	—
<hr/>			<hr/>			
54	42	Totals ...	33	25	523	203
<hr/>			<hr/>			

TABLE 16

SAMPLING OF KNACKER MEAT AND OFFAL FROM PET SHOPS
FOR SIX YEARS 1964/69

<i>Year</i>	<i>No. of Samples</i>	<i>Positive Salmonellae</i>	<i>Percentage</i>
1964	136	18	13·23
1965	145	40	27·58
1966	102	16	15·69
1967	93	45	48·39
1968	204	34	16·66
1969	116	14	12·06
<hr/>		<hr/>	
Totals	796	167	20·97
<hr/>		<hr/>	

PUBLIC ABATTOIR AND BACON FACTORY

CARCASSES AND PART-CARCASSES—MEAT AND OFFAL CONDEMNED

A.—CARCASSES AND PART CARCASSES

Disease or condition	Cows		Steers and Heifers		Calves		Pigs		Sheep	
	Carcasses	Part Carcasses	Carcasses	Part Carcasses	Carcasses	Part Carcasses	Carcasses	Part Carcasses	Carcasses	Part Carcasses
Abscess	—	—	—	5	—	—	8	87	1	4
Actinobacillosis	—	—	1	—	—	—	—	—	—	—
Anaemia	—	—	—	—	—	—	—	—	4	—
Arthritis	—	—	—	—	—	—	2	19	—	—
Bruising/Fractures	—	2	—	3	—	—	1	33	—	2
Emaciation/Oedema	4	—	1	—	—	—	—	—	57	—
Emphysema	1	—	—	—	—	—	—	—	—	—
Fevered	—	—	—	—	—	—	1	—	—	—
Immaturity	—	—	—	—	1	—	—	—	—	—
Jaundice	—	—	—	—	—	—	1	—	1	—
John's Disease	1	—	—	—	—	—	—	—	—	—
Malignant Neoplasms	—	—	—	—	—	—	2	—	—	—
Mastitis (Acute Septic)	—	—	—	—	—	—	—	—	1	—
Metritis (Acute Septic)	1	—	1	—	—	—	1	—	2	—
Moribund	—	—	—	—	—	—	15	—	2	—
Pericarditis (Acute Septic)	—	—	—	—	—	—	3	—	—	—
Peritonitis (Acute Septic)	1	—	1	—	2	—	2	—	5	—
Pleurisy and Peritonitis	—	—	—	—	—	—	51	—	3	—
Pleurisy (Acute Septic)	—	—	—	—	1	—	13	—	4	2
Pleurisy	—	—	—	—	—	—	—	72	—	—
Pig Erythema	—	—	—	—	—	—	—	28	—	—
Pneumonia (Acute Septic)	—	—	—	—	1	—	—	—	1	—
Presternal Calcification	—	—	—	—	—	—	—	—	—	—
Pyæmia	—	—	—	—	—	—	4	—	—	—
Pyelonephritis	—	—	—	—	—	—	—	—	1	—
Septicaemia	2	—	—	—	6	—	18	—	5	—
Swine Erysipelas	—	—	—	—	—	—	1	—	—	—
Umbilical Pyæmia	—	—	—	—	14	—	—	—	—	—
Uræmia	1	—	—	—	—	—	—	—	—	—
TOTALS	11	2	4	9	25	—	123	239	87	8
Cysticercus Bovis	2	—	12	—	—	—	—	—	—	—

B.—MEAT AND OFFAL

	1969			1968			1967		
	Tons	Cwtls.	Qrs.	Tons	Cwtls.	Qrs.	Tons	Cwtls.	Qrs.
Public Abattoir—Carcass Meat	...	7	10	2	1	8	9	19	0
Public Abattoir—Offal	...	84	16	1	8	27	77	11	2
Bacon Factory—Carcass Meat	...	5	8	2	17	9	5	14	3
Bacon Factory—Offal	...	14	3	2	26	5	12	8	1
Total	...	111	19	0	24	21	105	13	2

TABLE 18

SAMPLES SUBMITTED TO THE PUBLIC ANALYST

	<i>F</i>	<i>I</i>	<i>Samples</i>	<i>Unsatisfactory</i>
Milk	85	666	751	2
Ice-Cream ...	—	97	97	1
Other Foods ..	21	857	878	10
Medicines and Drugs	—	21	21	—
Rag Flock ...	—	34	34	—
Fertilisers and feeding stuffs ..	14	327	341	3
Water—baths			143	9
—others			25	1
Pharmacy and Poisons	—	3	3	1
Miscellaneous	—	164	164	74
Totals ...			2,130	101

TABLE 19

SAMPLES SUBMITTED TO THE BACTERIOLOGICAL LABORATORY

	<i>Samples</i>	<i>Unsatisfactory</i>
Milk—T.B. examination and brucella abortus ...	59	2
Pasteurised ..	598	9
Sterilised ...	39	—
Untreated ...	87	2
Ultra heat treated ...	2	—
Schools ...	82	—
Plant tests ...	69	—
Churn and bottle tests	635	128
Shellfish ...	23	7
Water ...	243	2
Ice-Cream ...	120	50
Miscellaneous	77	2
Totals ...	2,034	202

TABLE 20

SUMMARY OF BIOLOGICAL EXAMINATIONS OF MILK
FOR BRUCELLOSIS AND TUBERCULOSIS

<i>Year</i>	<i>No. of samples found to be infected with Brucellosis</i>	<i>Tuberculosis</i>
1962)		
1966)	14 from 9 producers	Nil
1967	Nil	Nil
1968	2 from 2 producers	Nil
1969	2 from 2 producers	Nil

TABLE 21

REGISTRATIONS

<i>Under Section 16, Food and Drugs Act, 1955</i>					
The manufacture of Ice-Cream ..	...	...	...	...	13
The storage and sale of Ice-Cream	...	...	...	...	1,369
The preparation or manufacture of sausages or potted, pressed, pickled or preserved foods ..	...	...	...	...	335
<i>Under the Milk and Dairies Regulations 1959</i>					
Dairies	...	...	...	...	47
Distributors	...	...	...	...	514
<i>Under the Rag Flock and other Filling Materials Act, 1951</i>					
Registered to use filling materials	...	...	...	...	12
Licensed to store Rag Flock	...	...	...	...	3
<i>Under the Pharmacy and Poisons Act, 1933</i>					
Listed sellers of Part II poisons	...	...	...	...	280

TABLE 22

QUINQUENNIAL LICENCES UNDER THE MILK (SPECIAL DESIGNATION) REGULATIONS, 1963

					1966-70
					<i>as at</i>
					<i>as at</i>
					31.12.68
					31.12.69
To process pasteurised milk	...	...	...	9	9
To sell pasteurised milk	...	...	...	531	574
To process sterilised milk	...	...	...	2	2
To sell sterilised milk	...	...	...	550	580
To sell untreated milk	...	...	...	21	21
To sell ultra heat treated milk	...	...	...	15	17

TABLE 23

FOOD COMPLAINTS INVESTIGATED

Commodity	FOREIGN BODIES										Mould, etc.	Dirt, etc.	Incorrect Labelling/ Misrepresentation	Abnormal smell/taste/ colour	Others	GRAND TOTALS
	Glass	Metal	Insects	Personal Items	Building Materials	Transit/ Packing Materials	Others	Not true Foreign Bodies	TOTAL FOREIGN BODIES							
General foods ...	2	4	22	6	—	3	8	7	52	10	—	1	36	6	105	
General canned foods ...	1	1	8	—	—	—	1	1	12	3	2	—	9	3	29	
Drinks (inc. ice-cream) ...	—	2	2	1	—	—	1	—	6	1	—	3	17	1	28	
Milk ...	7	—	2	—	—	—	2	3	14	—	11	1	8	—	34	
Bread ...	3	1	11	3	3	4	8	7	40	16	7	—	5	2	70	
Confectionery (excl. meat products)	2	3	6	1	1	1	1	2	17	14	1	—	10	2	44	
Meat and meat products ...	—	2	4	1	1	3	5	3	19	12	1	4	25	4	65	
Canned meats ...	—	—	1	—	—	—	3	1	5	1	2	1	9	1	19	
Fertilisers and feeding stuffs ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Others—pharmacy and poisons, medicines and drugs, rag flock, etc.	—	—	—	—	—	1	—	—	1	—	—	—	—	—	1	
TOTALS ...	15	13	56	12	5	12	29	24	166	57	24	10	119	19	395	

Total number of complaints received during the year :
Rats 2,876 Mice 2,118
Complaints not finally dealt with by 31st December, 1968 : 173.

<i>Visits and revisits for all purposes:</i>						
In respect of notifications under Part 1, Sec. 2.						
Prevention of Damage by Pests Act, 1949 ...						16,165
<i>Routine inspections:</i>						
Ship inspections—Avonmouth (visits and revisits) ...						1,855
Avonmouth Dock ...						3,449
Portishead Dock ...						23
City Docks ...						563
City Airport ...						11
River/Canal Bank ...						70
Waste ground, vacant sites, etc ...						475
Business premises (building sites, etc.) ...						288
Wasp nest destruction ...						570
Miscellaneous visits ...						2,449
Sewer treatment programme ...						24,228
Total ...						50,146

					1969
No. of complaints received	173
No. of visits made	789

Disinfection, Drain Tests, etc.

125

T A B L E 2 6
ATMOSPHERIC POLLUTION—SMOKE CONTROL ORDERS

<i>SMOKE CONTROL ORDERS</i>		<i>Domestic</i>	<i>Commercial</i>	<i>Industrial</i>	<i>Other</i>	<i>Total</i>	<i>Acreage of Area</i>	<i>Date Order Made</i>	<i>Date Order Confirmed</i>	<i>Date Order in Operation</i>
No. 1	...	315	1,053	109	33	1,510	220	9.12.58	24. 3.59	1.10.59
No. 2	...	113	79	34	12	238	50	24. 5.60	9. 9.60	1. 9.61
No. 3	...	438	582	18	39	1,077	100	24. 5.60	9. 9.60	1. 9.61
No. 4	...	632	113	12	10	767	100	24. 5.60	9. 9.60	1. 9.61
No. 5	...	27	15	1	5	48	15	24. 5.60	9. 9.60	1. 9.61
No. 6	...	10,625	149	27	31	10,832	3,000	13. 9.60	11. 5.61	1. 9.62
No. 7	...	3,523	81	5	24	3,633	1,580	11.12.62	16. 7.63	1.10.64
No. 8	...	8,276	177	17	75	8,545	2,150	23. 5.67	18. 4.68	1.10.70
No. 9	Making of this Order has been deferred by the Council.									
No. 10	...	1,794	181	44	28	2,047	304	10. 6.69	7.10.69	1.10.71
Total	...	25,743	2,430	267	257	28,697	7,519			

TABLE 27

OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963
(Registration—General Inspections)

Number of premises registered during the year	533
Total number of registered premises at the end of the year	8,424
Number of registered premises receiving an inspection during the year	1,284

TABLE 28

OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963
(Number of visits of all kinds by inspectors to registered premises)

Offices	396
Retail shops	713
Wholesale shops and warehouses	106
Catering establishments and canteens	69
Fuel storage depots	—
Other visits L.A. Circ. 5. Para. 7	4,433
Total	5,717

TABLE 29

OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963
(Analysis of persons employed by workplace)

Offices	45,821
Retail shops	20,378
Wholesale departments, warehouses	7,023
Catering establishments open to the public	5,574
Canteens	699
Fuel storage depots	78
Total	79,573

TABLE 30

OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963
(Exemptions)

Total number of exemptions granted	3
---	---

TABLE 31

OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963
(Prosecutions instituted of which the hearings were completed in 1969)

<i>Section Nos.</i>	<i>No. of informations laid</i>	<i>No. of informations leading to a conviction</i>
4	1	1
9	1	1
Total	2	2

No. of persons or Companies prosecuted	1
No. of Complaints under Section 22	Nil
Interim Orders granted	Nil

TABLE 32

OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963 (Accident Reports)

Total No. of accidents reported to the local authority 220

TABLE 33

SHOPS ACTS, 1950/65

<i>Visits</i>	Retail	...	...	...	...	...	1,544
	Wholesale	...	...	...	...	...	48
<i>Revisits</i>	Retail	...	...	...	...	...	111
	Wholesale	...	...	...	...	...	3
<i>Infringements</i>	Failure to exhibit notices	...	...	...	...	...	238
	Closing hours	...	...	...	...	...	15
	Meal intervals	...	...	...	...	...	8

SUNDAY ENTERTAINMENT ACT—CINEMAS

<i>Visits</i>	21
<i>Revisits</i>	1

YOUNG PERSONS (EMPLOYMENT) ACT, 1938

<i>Visits</i>	12
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THE REPORT OF THE SCIENTIFIC ADVISER AND OFFICIAL AGRICULTURAL ANALYST FOR THE CITY AND COUNTY OF BRISTOL FOR THE YEAR 1969

Incorporating the work on behalf of the County of Gloucester and the City of Gloucester

E. G. Whittle, B.Sc.(London), M.Chem.A., F.R.I.C.

INTRODUCTION

This report is the tenth since the return of the department to full corporation control in 1960 and my twenty-third since appointment as Public Analyst in 1947.

The overall number of examinations was 9,914 including 345 smoke recordings. The "true" sampling rate is therefore 9,569. The 1968 total was 10,745. This very significant drop in samples has its explanation in a year of extraordinary upheaval of staff and in fact even now it will be February 1970 before we again have a full staff.

The year began with a change in the office. Mrs. Bulpitt left in December 1968 and Mrs. V. Gale took her place in February 1969, to be followed by a further change in October when Mrs. Gale resigned and Mrs. C. Wels took over in December 1969.

We were well aware that this would be a year of change and the end of an era for Mr. C. R. Turner retired in March after over 50 years of loyal and valuable service to the city. We shall all miss him very much and Mr. Needs, your former analyst, said of Mr. Turner over twenty years ago that he was an invaluable assistant and the "salt of the earth". Mr. Turner had seen all aspects of our work and since 1960 had been the Chief Analytical Assistant. The situation was revised with this retirement in mind and Mrs. S. Martin took over duties in the water section in July. Mr. Fisher had very capably tackled all the water work in the March-July interval.

At this time it was indeed "all hands to the pump" for Mr. Dembrey likewise retired in June. Mr. Dembrey joined the staff in June 1927 in even the pre-University Preventive Medicine Department days. He too gave many valuable years of service to analytical chemistry. He will be remembered by his colleagues for his ready championship of the under dog, his caustic wit with occasional blue overtones, a willingness to battle on for apparently lost causes and to me personally as a loyal and ever helpful colleague for over twenty years. Whilst he has now become a senior citizen we at Canynge Hall were very pleased when he decided "to keep his hand in" by joining Dr. James, Consultant Analyst in this city. Mr. Dembrey has a very lively mind and a wide range of interests which have already made him invaluable to Dr. James. He is certainly not yet prepared to rusticate.

His retirement brought its problems which were resolved in August with the appointment of Mr. D. J. Taylor as Deputy Public Analyst, although I regret the fact that the appointment was no longer as Additional Public Analyst. The designation as Deputy Scientific Adviser fortunately remains. Mr. Taylor was the unanimous choice of the committee and I was personally delighted that he should follow Mr. Dembrey. Mr. Taylor has already given sixteen years of service. He is keenly interested in all aspects of analytical chemistry and has already given valuable help with many of the newer techniques.

Consequent upon Mr. Taylor's promotion, other changes were necessary. Mr. G. J. Dicks in effect succeeded Mr. Taylor as Principal Assistant and the third post of Principal Assistant was duly advertised and in February 1970 we shall be joined by Mr. R. Evans from the Glamorgan County Laboratory. Mr. Evans has recently obtained his M.Chem.A. and should certainly strengthen our analytical team.

Mr. Holden, who had joined the staff in 1965, decided to emigrate to New Zealand and he resigned in April and eventually took up his appointment in New Zealand in June. We had some very interesting and informative airmail letters describing the voyage to the Antipodes and we all wish him and his wife every success and happiness in their new and exciting venture.

Mr. R. Fudge was appointed in August to succeed Mr. Holden. This was a well-merited promotion for a very keen and enthusiastic young man who should in a few years be a strong candidate for the M.Chem.A. qualification.

Slowly, therefore some of our problems were being resolved but not before other troubles and a catastrophe in early July when Miss Westcott, one of the stalwarts of our organisation, was involved in a road accident outside her own house and in which she suffered a broken hip and severe shock and bruising. Nevertheless she made a remarkably quick recovery and was at work again in early September.

Mr. Fudge's promotion caused a vacancy in our analytical assistants posts and this was eventually filled by the appointment of Mr. A. M. Biggs who joined us on 1st January, 1970. Miss J. Mines, a trainee assistant resigned in October and her post was subsequently filled with the appointment of Mr. A. Carey who is due to start here in February 1970. Our troubles were not entirely over because we were further hit, in common with the rest of the country, by the December flu' epidemic but the advent of 1970 saw most of us back on duty and with the prospect of a full staff again and a very full year ahead.

The Annual Report is the one place where I can officially thank all members of staff for their co-operation and willing service. I take particular pride in doing this after a very trying year of comings and goings. Several members of staff found themselves seconded to routines with which they had lost contact but everyone responded admirably and very willingly. I would also acknowledge the interest shown by the Environmental Sub-Committee and by the Weights and Measures Committee of Gloucester County.

Finally, I must thank all members of the inspectorate staffs with whom we have daily contact. This personal and regular contact with the laboratory staff is so very important to our continued progress and the inspectors are at all times most co-operative and helpful. It is our pleasure to know and work with them all.

SUMMARY OF SAMPLES EXAMINED DURING THE YEAR ENDED 31st DECEMBER, 1969, FOR THE CITY AND COUNTY OF BRISTOL, THE THE COUNTY OF GLOUCESTER AND THE CITY OF GLOUCESTER

	<i>Bristol</i>	<i>Gloucester County</i>	<i>Gloucester City</i>
Milk	751	921	54
Food and Drugs	980	843	286
Waters, Swimming Baths and Effluents	221	159	5
Fertilisers and Feeding Stuffs	—	290	29
City	14	—	—
Avonmouth	328	—	—
Miscellaneous Samples	816	268	11
Port Health—City	123	—	—
Avonmouth	704	—	—
Rag Flock	37	—	—
District Health Inspectors' Samples	24	—	—
Pharmacy and Poisons Act	3	3	—
Air Pollution—Lead peroxide	60	24	3
Deposit gauges	71	24	11
Smoke Recordings City	655	—	—
Spectographic Analyses	761	100	16
Gas Chromatography	—	332	81
Chlorination	319	125	23
Trades Description Act, 1968	—	40	—
Toys Safety Regulations, 1967	40	70	—
Thornbury Special Survey	—	44	—
	<hr/> 5,907	<hr/> 3,243	<hr/> 519

Smoke Recordings Miscellaneous for Dursley and Stroud

Authorities 345
GRAND TOTAL 9,914

FOOD AND DRUGS ACT

New Legislation, Definitions, Reports and Recommendations

Two sets of regulations were made late in December 1968 which became operative on 4th January, 1969. Both pertained to meat products and were—

- (i) The Canned Meat Product (Amendment) Regulations, 1968
- and
- (ii) The Sausage and Other Meat Product (Amendment) Regulations, 1968.

The first amended the Canned Meat Product Regulations, 1967 by—

- (a) exempting canned sliced bacon from any requirement as to lean meat content;
- (b) setting a separate standard (90%) for the meat content of chopped or minced meat which is suitable for slicing;
- (c) restricting the use of the expression “ready meal” on the label of a canned meat product;
- (d) applying labelling requirements to canned meat products only when such products are in containers.

The second amended the Sausage and Other Meat Products Regulations, 1967 so as to—

- (a) provide that the principal regulations do not apply to a canned meat product after its removal from its container;
- (b) restrict the use of the expression “ready meal” in relation to a meat product.

It is worth mentioning that these two amended regulations enacted in June 1967, became operative from 31st May, 1969. References to these regulations were made in my Report for 1967.

The Solvents in Food Regulations, 1967 were amended early in 1968 by the Solvents in Food (Amendment) Regulations, 1967 and which became operative on 3rd November, 1969. These amending regulations make one correction to the specification of glycerol tri-acetate, a permitted solvent, set out in Schedule 1 in the original order.

An announcement by the Minister of Agriculture, Fisheries and Food was made on 23rd October, 1969 that until the safety of cyclamic acid and its salts could be established by further investigation, a ban on its use in food, drink and sweetening preparations would be imposed. Regulations to this effect were made, prohibiting their use after 1st January, 1970. These were—

- (i) The Artificial Sweeteners in Food Regulations, 1969
- and (ii) The Soft Drinks (Amendment) Order, 1969.

The first regulations superseded the Artificial Sweeteners in Food Regulations, 1967 and became operative on 1st January, 1970. The principal change is that cyclamic acid, calcium cyclamate and sodium cyclamate are no longer permitted artificial sweeteners or permitted ingredients in artificial sweetening tablets. The second set of regulations amend the Soft Drinks Regulations, 1964 as from the 1st January, 1970 and—

- (a) amend the definition of “permitted artificial sweetener” so that saccharin, saccharin calcium and saccharin sodium are the only permitted artificial sweeteners;
- (b) amend the principal regulations in relation to declarations on the sale of soft drinks in or from vending machines;
- (c) make changes in the forms of expressions on labels of containers of soft drinks containing any permitted artificial sweetener;
- (d) amend existing specification for saccharin and its salts.

Weights and Measures legislation affecting drugs came into force in March 1969 in the shape of “The Weights and Measures (Equivalent for dealings with drugs) Regulations, 1969. These regulations prescribe for the purpose of any dealings with drugs, equivalents between the grain and the milligramme, the minim and the millilitre, the ounce and the gramme, the fluid ounce and the millilitre. The regulations also require that from the dates mentioned in regulation 5, orders or prescriptions for the supply of drugs expressed in terms of grains, minims, ounces or fluid ounces are to be carried out in terms of the metric equivalent prescribed by the regulations. These regulations supersede the Weights and Measures (Equivalent for dealing with drugs) Regulations, 1964.

A point arose in connection with the inclusion of “coccidiostats” and “antiblackhead remedies” in feeding stuffs intended for other classes of livestock other than poultry (e.g. cattle, sheep and pigs). The Ministry of Agriculture, Fisheries and Food have made a ruling that despite the fact that these substances are not used in these feeds for their designed purpose, they do control other diseases, e.g. scouring in pigs and therefore their presence must be declared.

A revised list of the recommended common names for the main coccidiostats and antiblackhead remedies was published on 5th December, 1969. The revised list was necessary because of the addition of a new drug “nifursol” and the re-naming of two other drugs “metachlorpindol” as “clopidol” and “zoalene” as “dinitolmide”. The common names under which coccidiostats and antiblackhead drugs are now known are as follows:—

Acinitrazole, Amprolium, Carbarson, Clopidol, Decoquinat, Demetridazole, Dinitolmide, Ethopabate, Furazolidone, Methyl Benzoquate, Nifursol, Nitrofurazone, Sulphaquinoxaline.

The Food Additives and Contaminants Committee have been asked by the Ministry of Agriculture, Fisheries and Foods to review again the use of Butylated Hydroxytoluene (BHT) a permitted antioxidant. In their last report (1966) the Committee recommended that its use should continue at existing levels, but that its use should be reviewed in two years. This period has now elapsed and the Ministry are inviting representations from interested parties.

On October 27th 1969, the Food Standards Committee published a report of their recommendations in the review of the Condensed Milk Regulations 1959. In the main, the committee recommended the continuance of the compositional standards for condensed and evaporated milk with only some minor alterations.

The main recommendations are—

- (a) The statutory declarations of the two categories should be brought up to date, i.e. “condensed milk” for the sweetened and “evaporated” for the unsweetened.
- (b) A maximum fat content for skimmed milk should be laid down and the use of the term “low-fat” should be permitted.
- (c) The words “half cream” should not be permitted as part of the name of the statutory declaration.
- (d) Recommended standards of composition should be continued with one minor increase in the percentage of milk solids including fat in the case of evaporated skimmed milk from 20% to 22%.
- (e) Sugar should be defined.
- (f) Additives should be controlled as to permitted substances and amounts.
- (g) Certain minor changes should be made to the statutory declarations.

SUMMARY OF MILK ANALYSES BRISTOL (ONLY)

Total milks (ordinary and Channel Islands) ...	751
Fat deficient (ordinary)	Nil
Added water (ordinary)	Nil
Abnormal NFS	2
Poor quality fat—just less than 3 per cent ...	Nil
Channel Islands (satisfactory) ..	151
Channel Islands (unsatisfactory) ...	3
Antibiotic milks	17
Separated milk	1
School milks	57

This represents a remarkably satisfactory position in respect of the city milk supply. Compositionally only 3 of 751 were fat deficient. All three were Channel Islands milks. Otherwise ordinary milk and school milks were all satisfactory and there were only two abnormal milks. 17 samples taken for antibiotics also proved satisfactory and free from penicillin.

ADULTERATED SAMPLES OTHER THAN MILK

VD.121	Whiskey	formal	Contained 6·4 per cent of added water.
ZD.79	Dairy Ice Cream	informal	Contained 9·9 per cent fat of which only 6·6 per cent was milk fat. In a dairy ice cream the whole of the fat must be derived from milk.
WD.127	Soft Drink Powder	„	Contained Rhodamine B, a prohibited colouring.
to WD. 130			
WD.110	Rum and Butter Sweets	„	No evidence of rum or butter.
131			Repeat formal sample unobtainable.
VD.246	Piping Jelly	„	Contained Blue VRS, a prohibited colouring.
WD.247	Meat Pie	„	36·5 per cent deficient in meat.
ZD.140	Golden Butter Mints	„	Contained no butter fat.

COMMENT ON OTHER FOOD AND DRUGS SAMPLES

A survey of food colours held in school kitchens covered some 119 samples all of which proved to be permitted colours.

35 general food commodities from school kitchens also proved satisfactory.

A sample submitted as a Cornish Twist was satisfactory in composition when regarded as a pastry.

Ten meat products were examined for nitrite and sulphur dioxide. In all cases sulphur dioxide was absent. In two instances nitrite was declared and found to be 52 p.p.m. in each case. In the

remaining eight samples the nitrite ranged from 2 to 25 p.p.m. which amounts might be natural to meat products in which traces of nitrite might well be in the prepared meat.

A survey of raw and cooked potato chips was made in respect of sulphur dioxide. Surprising residuals of sulphur dioxide were carried over to the cooked product and chip processors should be advised of the need to wash the chips thoroughly before drying to reduce the final amount of sulphur dioxide in the cooked chips.

A number of ground nuts samples were free from aflatoxin.

Several samples of fish cakes gave fish contents in the range 41 to 54 per cent. This would support my contention that the 35 per cent minimum standard could usefully be raised to something like 45 per cent.

6 liquid egg samples satisfied the amylase test for correct pasteurisation.

93 ice cream and dairy ice creams were examined. One dairy ice cream received adverse comment.

Baby foods were of satisfactory composition free from infestation and rancidity. All reconstituted well.

41 soft drinks satisfied the Soft Drink Regulations and in particular showed no excessive use of cyclamates.

A vinegar VD 210 was designated as a malt vinegar but on average figures could have contained some non-brewed condiment.

VD 230, a pork luncheon sausage, contained 66 per cent of meat. A filler preparation, amasol, provided a nitrogen contribution of 1.7 per cent. The formulation of these sausages was provided and was reasonably accurate.

VD 236, Curry paste. This preparation would not keep long in the moistened state. It would be preferable to prepare curry powder as a paste immediately before use.

VD 286, Mint flavour sauce, was correctly described and labelled. The use of the word "flavour" suggested that mint was not necessarily natural.

VD 305 to VD 310, canned soups contained no excessive tin or lead. All gave indications of alcohol from 0.02 to 0.3 per cent proof spirit. VD 307 also contained isopropyl alcohol. Much alcohol would be lost in processing the soups although some essential flavouring characteristics of wine, spirit or beer as claimed would possibly be retained. The use of spirituous liquors in this fashion is something of a gimmick and without any real food value.

WD 187, Pearl Barley contained several dead mites and much dust. The article should be discarded.

WD 205, Chocolate Vermicelli had a soapy taste and should be discarded.

WD 220, Horseradish Sauce from a school kitchen was lumpy and out of condition. It has little general appeal, particularly to schoolchildren. It should be purchased in small quantities and used promptly.

A number of continental cheeses including Gouda, Danbo, Samso and Havarti, satisfied the Cheese Regulations. Fynbo and Manbo are not covered by the Regulations.

ZD 151, Rum Ba Bah contained 24 per cent of fat in the "cream" portion but this was devoid of butterfat. The article should be designated as "contains imitation cream".

ZD 158, a creamy head preparation contained potassium sorbate which is permitted only in four listed foods as laid down in the Preservative Regulations 1962.

ZD 159, Clementines were treated with both wax 32 p.p.m. on the whole fruit and 16 p.p.m. of orthophenylphenol (70 p.p.m. is permitted). There appears to be no legislation to prevent the waxing of citrus fruits.

FERTILISERS AND FEEDING STUFFS ACT

	<i>Formal</i>	<i>Informal</i>	<i>Comment</i>
Fertilisers (City)	14	—	3
Feeding Stuffs (Avonmouth) ...	—	327	44

Among the fertiliser samples was one of Ammoniated Gas Liquor. Few of these have been encountered. The nitrogen content was satisfactory, the product was free from visible tar and the thiocyanate level within the required limit.

Faults in fertiliser samples were one of excess of nitrogen, soluble phosphate and potash in a general fertiliser whilst a lawn dressing had an excess of insoluble phosphate and another general fertiliser had a low soluble phosphate.

The Port Inspectorate submitted 327 informal feeding stuffs during the year. Faults in 44 samples are summarised.

Low in Pancoxin	...	...	1
Excess of oil	...	...	9
Low in oil	...	...	3
Excess of protein	...	...	23
Low in protein	...	...	2
Low in copper	...	...	3
Excess of copper	...	...	1
Deficient in urea	...	...	1
Low in fibre	...	...	1

The Fertiliser and Feeding Stuffs Regulations 1968 require additional examinations for metals and drugs in special instances and during the year 93 such examinations were made, including—

Zoalene	...	...	in 6 samples
Deccox	...	...	2 "
Magnesium	...	...	10 "
Copper	...	...	43 "
Dimetridazole	...	...	5 "
Furazolidone	...	...	1 "
Pancoxin	...	...	15 "
Methylbenzoquate	...	...	1 "
Emtryl	...	...	2 "
Sulfaquinoxaline	...	...	2 "
Decoquate	...	...	2 "
Ethopabate	...	...	1 "
Metiolorpindol	..	...	3 "

This implies that besides the normal requirements of oil, protein and fibre in all 327 samples, 93 samples or approximately one in three required additional and special attention. Methods have been established for at least 11 new drugs and most are complex and time consuming. Incidentally the 15 samples examined for Pancoxin are probably the most difficult. Pancoxin comprises the three drugs Amprolium, Sulfaquinoxaline and Ethopabate. All the additions are either coccidostats or antiblackhead drugs.

Referring to the 1968 Report, 10 per cent of feeding stuffs required special treatment whereas in 1969 the proportion is up to 28 per cent.

WATERS AND SEWAGE ANALYSES

Bristol

City water from tap at Canynge Hall	...	...	9
City water from pumping station at Jubilee Road	...	...	11
Mains supplies	...	...	7
Ships in port	...	...	12
Council House (heating system)	...	...	6
Seepage waters	...	...	16
Streams	...	...	6
Well waters	...	...	1
Miscellaneous	...	...	10
Swimming Baths	...	...	143
			221

A sample of water was taken from the River Trym where it entered the Wild Life Park at Westbury-on-Trym. It contained a heavy grey/brown sediment giving rise to concern in case it might affect the animal life of the park. A detailed examination revealed that the deposit was probably due to a slight landslide in the underground passage of the river, and as such was of no danger.

Several samples have been taken from 20 Sandcroft, Whitchurch, Bristol. This water has a very strong petroleum-like odour but as yet it has been impossible to trace the source.

Bristol Waterworks Supply

Sampled at	<i>Canynge Hall</i>	<i>Jubilee Road</i>
No. of samples ..	9	11
<i>Range of variation (parts per million)</i>		
Total solids ...	244—286	217—263
Chlorine as chloride ...	13·5—18·0	16—20
Nitrate nitrogen ...	0·1—3·4	0·5—3·63
Total hardness ..	154—238	146—186
Permanent hardness	49—69	49—67

FIELD REPORT

The workshop facilities for repair, redesign and making of parts, sometimes in special materials and to precision standards, continue to be used to good effect. This activity makes a valuable saving in the overall cost of running some of the more sophisticated instruments in the department.

Outside activities have continued much as before, with Croydon Hall special school and the Bush Training Centre occupying somewhat less time than in previous years. However, there has been a big increase in the number of requests for guidance and advice in running the small pools used at many schools. Some of these pools present problems in that the heavy load of perhaps 200—300 children per day is far beyond the capacity of the plant which was designed for private use.

We have been called to render assistance to the Baths Engineer on a few occasions when he has met some intractable chemical problem. The occasional “gas leak” or “bad smell” has required investigation, sometimes with no really satisfactory result.

For Gloucestershire and local authorities, there have been calls for advice on swimming pool, water supply and sewage purification problems.

An emergency call was received with reference to a suspected leak of cyanide solution at a photographic chemists establishment but there was no actual danger of pollution.

RAG FLOCK ACT

Thirty-seven samples of rag flock and allied products were examined in the first instance microscopically to ascertain the nature of the article. Then in appropriate cases the amount of chloride is determined as required by the Regulations. Several items were not true flocks. In one or two instances the chloride reached the maximum permissible figure of 30 parts per 100,000. All other samples were satisfactory.

PHARMACY AND POISONS ACT

Only three samples required investigation, a relatively quiet year. These were a scale remover with 52 per cent w/v of acetic acid; a rust remover with 31 per cent of phosphoric acid (35 per cent was declared) and a ready pack of a formaldehyde preparation of 80 per cent w/w as declared which in fact contained 70 per cent. All three preparations were adequately labelled.

GAS LIQUID CHROMATOGRAPHY (GLC)

Because of pressure of work in other directions the food inspector during the year found little or no time to cope with samples specifically for pesticide work. From the general foods submitted the laboratory made an appropriate selection for GLC treatment.

SPECTROGRAPHIC EXAMINATIONS

The examinations made in the last four years are compared in the following table :—

	<i>Bristol City</i>	<i>Gloucester County</i>	<i>Gloucester City</i>
1966 ...	1,001	40	15
1967 ...	1,140	52	2
1968 ...	993	129	12
1969 ...	761	100	16

The drop in 1969 once again reflected staff problems of the year in that no technician assistance was available certainly in the last three months of 1969, following upon a resignation. The fall occurred primarily with city samples. The position with Gloucester county and city is well maintained and much as in 1968.

There were no major instances of contamination by metals. Tinned goods from a shop damaged by fire were tainted by smoke although the cans appeared sound.

A sample of Abalone was received from the docks. This is a delicacy in Western America and in Australia. It is a limpet-like mollusc. Its shell is characterised by four holes on one side. It is also known as Ormer Haliotis.

A number of air pollution samples were examined for zinc in connection with a dust nuisance.

Several food colourings mainly derived from school canteens and obviously old stock contained the prohibited Blue VRS colouring. A grape flavoured drink as a powder contained Rhodamine B, another non-permitted colouring.

MISCELLANEOUS

1. City of Bristol General Examinations	283
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4. Gloucester County	268
5. Education Department	65
6. City Engineer's Department	10
7. Port of Bristol Authority	8
8. Port Health	827
9. Housing Department	19
10. City Architect's Department	1
11. Horticultural Officer	6
12. Weights and Measures Department	71
13. Baths Superintendent	1
14. Toys (Safety) Regulations	40
15. Gloucester City	8
16. Special Survey—Thornbury R.D.C.	44
17. District Inspectors' Samples	24
18. Geriatric Survey	17
19. Town Clerk's Department	1
	<hr/>
	1,978
Smoke Recordings—City	635
" " —Miscellaneous	345
	<hr/>
Grand Total	2,958

1. City of Bristol—General Examinations

From the 283 examinations made, the following is a selection of the more interesting items.

A sample of grapefruit in syrup in a can showed signs of severe attack on the can. This prompted the comment that once such products are opened they should be removed from the can. Similarly with canned tomatoes with a tin content of 200 p.p.m., there is little doubt that this amount of metal will promote metallic tastes in tomatoes.

It was thought desirable, in view of the reports of the presence of cobalt in beer, to examine certain brewery items. Brewers malt, hops and finings gave the following respective cobalt figures 0.13, 1.54 and 0.13 p.p.m.

An apple contained no pesticide but had a dusting of talc.

A toilet roll contained 2g. of undyed paper fibres of the same composition as the paper of the roll.

Several bones from a Chinese meal were shown to be poultry bones, possibly turkey rather than chicken.

A rose hip syrup contained 117 milligrams of Vitamin C per 100 ml and was of poor quality in relation to most such syrups which have 4 to 5 times that amount.

A concentrated liquid baby food was distinctly more acid than an unopened control. It is very desirable to use such milk promptly once opened.

A cheese pack containing three portions of cheese one of which was brightly dyed with a permitted colouring—annatto.

White filaments in a deposit from a gully were probably sewage fungus. The commonest fungus is *Sphaerotilus natans*.

A coffee yoghurt was normal in all respects although it is very probable that a coffee flavour would not appeal to all consumers.

A fruit tart and a sample of flour used on the pastry were examined for astringent tastes. The flour was satisfactory and it is probable that incomplete mixing of baking powder caused the complaint in respect of the tart.

A sample of Fosferno "20" was identified as parathion and was destroyed as requested.

A white powder found in boxes of imported pears was shown to be chalk possibly as a moisture absorbent.

Two solutions of copper sulphate were examined on behalf of the Blood Transfusion Service. Both were identical with the specific gravities which were as expected.

A coffee flavoured icing had a pale green colour due to copper at 2.7 p.p.m. The traces of copper may have come from a brass-backed thermometer used during the preparation of the icing.

A sample of beef sausage submitted by the Governor, H.M. Prison was shown to contain 70 per cent of meat—a very satisfactory figure and notably better than many retailed beef sausages. It is also apparent that only beef sausages and not pork are provided for Her Majesty's guests!

A sample of rusks had picked up the odour of a scented detergent powder. Many foods will acquire scented or other smells from highly perfumed products.

A specimen of strychnine was submitted by the Gloucestershire County Constabulary. It was confirmed as such and destroyed.

Chocolate eclairs were alleged to contain paraffin or methylated spirit. Both were absent.

The edible gum used in a tea maker unit was not part of the tea in the packet and hence did not require declaration on the label.

An ice lolly contained 0.7 per cent of salt possibly from brine used in the refrigeration of the lollies as manufactured.

A skimmed milk powder gave acidity and moisture figures indicating the need for prompt use. Comment was made on bulk buying and the limited usage of such powder.

Four of the eight segments of a lemon showed a deeper yellow colour undoubtedly due to over-ripening of the fruit on one side.

As a result of an accidental discharge from a chemical factory in the Avonmouth area some arsenic was released as potassium arsenate. Some beef cattle grazing in the area were affected and two animals died. Arsenic was demonstrated in the livers of the order of 12 p.p.m. Certain other animals were ill but recovered in a few weeks away from the contaminated grazing land within the factory area. Many samples of leaves from brassicas, waters from rhines, deposited rainfall were examined for arsenic with completely negative results except for two rain waters showing 1.2 and 1.6 mgms per 100 ml of rain. It was, therefore thought that the degree of contamination was very local indeed and contained within the factory confines; that there was no danger to the public in the surrounding area. Although the factory management were at fault in failing to notify the local medical officers and health officials, the local press could be equally faulted for publicising the incident out of all proportion to the actual consequences.

2. Biochemical and Toxicological

One hundred and fifty-seven specimens were examined and a considerable number of these resulted from the use of mercury in a factory.

A sample of powder and pills submitted by the Maternity Hospital gave no evidence of ergot as was suspected. The powder was plant material mixed with soil. The pills contained much oil.

Several blood specimens from the Old People's Home were examined for Vitamin C level in continuance of the geriatric survey mentioned elsewhere.

Meat and cooking liquor were examined for the R.S.P.C.A. but there was no evidence of poisons and in particular no evidence of strychnine as was alleged.

Seven urines were examined for Inter-City Newscasters Ltd. Mercury is involved in the news processing and a watch is maintained on the health of two full-time and two part-time operatives.

A number of pigs' livers were examined for arsenic. Seventeen had arsenic figures from Nil to 0.9 and eight had 1.0 to 2.0 p.p.m. which is in excess of the limit of the Arsenic in Food Regulations.

Six urines examined for H.M. Inspector of Factories had an arsenic range of 0.01 to 0.14 p.p.m. or within the accepted normal range.

Two samples of a blood and two of urine submitted by the Public Health Laboratory Service were examined for lead.

Four urines and four bloods were examined for lead on behalf of St. Martins Hospital, Bath and three urines and one blood were examined for mercury and lead for Bath Area laboratories.

It will be noted that the bulk of our work in the biochemical field relates to lead and mercury in blood and urines.

3. Foreign bodies in foods, insects and infestation

128 examinations were made and the following selection illustrates the wide and indeed curious collection of objects which find their way into foodstuffs.

A snail in a milk bottle caused a considerable amount of work but we had finally to admit that it was not possible to prove beyond doubt that the snail and bottle had not passed through the bottle washing process.

A chocolate cake contained a portion of hair probably human.

A bread contained portions of soiled dough and fragments of the insect *ptinum tectus*.

Several insects were identified as specimens of *Attagenus pello*.

A stuffed pork roll was indeed stuffed but with a piece of fabric comprising dyed fibres of cotton and jute.

A bread contained a polystyrene plastic, possibly part of the blade from a mixer.

An insect alleged to have been found in watercress was identified as a small fresh water leech.

A sample of corned beef contained a fragment of wood.

An alleged piece of plastic was in fact a crystal of struvite.

The foreign matter in some nuts and raisins proved to be moth larvae.

Some garden peas contained half of the flowering head of the daisy.

Flaked almonds contained greyish particles identified as the droppings of a small bird.

A can of consomme soup contained no soup but only water possibly canned inadvertently at the end of a plant run during cleansing operations. It might equally have been a practical joke.

Some frozen chipped potatoes contained a pebble with adhering starchy matter which was not potato starch.

A custard tart contained a portion of a human fingernail.

Green beans contained a portion of gum or sealing compound.

A milk bottle contained a 10 gram portion of glass in the shape of a portion of the rim of the milk bottle.

A steak and kidney pie contained a spent match in all probability cooked in the pie.

A loaf of bread contained the pupal case of a beetle with portions of an insect's head and legs in another part of the loaf.

Some french beans contained the Dor beetle—a beetle of wide distribution and common in the countryside.

A baby food contained a fly identified as the female of the lesser Housefly.

The wooden arm of a fireside chair contained the larvae form of the Longhorn beetle which has a life of 5 to 20 years. This very curious incident caused considerable bother to the householders and the curious ticking noise from the insect certainly upset both husband and wife.

An insect, a common weevil, was alleged to have been found alive in imported frozen meat. A similar test insect, however, failed to survive 4 hours at minus 5°C. and hence the allegation appeared highly improbable.

A milk contained several silver fish.

A cheese contained a mutilated insect, the *Phoridae* diptera.

A luncheon meat contained the common *Aphodius rufipes*.

A can of plums contained eighteen mature honey bees. Lengthy court proceedings with three adjournments eventually resolved the question of responsibility as between retailer, wholesaler and packer. The presence of the bees was not contested.

A dress imported from Hong Kong consisted of synthetic cotton fibres with a black and red resinous material. There were no insect eggs of any kind.

A bread contained portions of a small moth and fragments of wing and legs in the crumb of the uncut loaf.

A foreign body in canned corned beef consisted of a tuft of bovine hairs.

A biscuit contained a buff-coloured cotton thread.

A sausage roll contained a live male earwig.

A granary cob loaf contained a tuft of three portions of strings.

Canned salmon contained a crystal of struvite.

An insect submitted by the Veterinary Officer to the city proved to be a common millipede.

A chocolate coconut bar contained a 1½" strip of metal mainly of aluminium with traces of magnesium, copper and iron.

A bread contained a cigarette butt. The filter tip had some adhering strands of tobacco and some remnants of tobacco paper.

A portion of Genoese cake contained a rusty nail one inch long and probably baked in the cake.

A can of corned beef contained an opening key embedded in the meat.
 Insects shown to be *Mycetaea Hirta* were found in rotten wood, vegetable and haystack refuse.
 Eleven slices of a loaf of bread were all heavily contaminated with black and yellow mould colonies.
 An insect was identified as the caterpillar of the Elephant Hawk Moth.
 A wood louse was found embedded in the crust of a cheese pasty.
 A sample of water contained two hair worms.
 A Battenburg cake contained a moth, a beetle and some mould growth.
 A sample of blackeyed beans showed insect attack with many holes and with grubs inside.
 There were many adult beetles of the pea and bean weevil family.
 An orange drink contained fragments of the common blue bottle.
 A bottle of milk contained 10 g. of glass fragments.
 Sausages contained a 3½" length of fine cotton string held at the surface of the sausage by a portion of fat.
 A tin of apples contained a small brown spider.
 A sample of prawn chow mein contained the red-legged ham beetle, *Necrobia rufipes*.
 Each slice of a specimen of crispbread showed moth larvae of the species *Ephestia*.
 A corned beef showed a thick pellicle of mould growth and was quite unfit.
 An insect was identified as the male cockroach, *Blatta orientalis*.
 Canned raspberries contained a small piece of a coarse folded paper and a small stone.
 A cake contained a piece of metal weighing 0.44 g. and consisting of stainless steel possibly from a mixing bowl.
 Peas contained a nocturnal moth of the Noctuidal family.
 Some pilchards in otherwise sound condition contained a minute amount of greenish coloured matter due to particles of marine life taken in by the fish.
 A bread roll contained a 1" splinter of wood.
 Numerous white spots on the surface of ham in a ham roll were shown to be fat globules and salt crystals.
 Some insects were identified as the house mite, *Glyphagus domesticus*.
 Two portions of the same loaf contained portions of the *Tribolium* beetle.
 Pepsi Cola contained two pellicles of mould growth of different diameters, probably formed at different times in the neck of the bottle.
 A sausage contained a piece of coarse brown paper folded several times.
 A yoghurt contained a piece of wire with a tuft of cotton fabric attached. The fabric was probably from a label.
 A sausage contained a few hard fragments of a hard thermoplastic resin.
 A bagged self-raising flour showed dead booklice on the packet but no infestation of the flour.

4. Gloucester County

268 samples, a very considerable increase from the 98 specimens of 1968, will be considered and summarised in Part IX.

5. Education Department

65 samples were examined and these included washing-up liquids, hand cleansers, toilet soaps, soap flakes, liquid detergents, disinfectants, metal polishes, toilet rolls and packs, sterilising agents, a floor screed, fungicides and several soils.

6. City Engineer's Department

Examinations of soils for pH and sulphates, oil residues for metals, stream and water samples and a deposit in a water were required for this Department.

7. Port of Bristol Authority

The eight specimens submitted were a skin cleaner, a drinking water, shea nut pellets, a corrosive liquid consisting of 91 per cent sulphonic acid and four samples of sweepings and samples from bags which all contained asbestos.

8. Port Health Office

827 samples were submitted and as usual the bulk came from the Avonmouth Docks. Indeed in the last quarter no samples arrived from the City Docks, a sign perhaps of imminent closure and

for all goods to be concentrated in the Avonmouth Docks. A selection of some of the samples received is appended with notes of some interest.

Cartons of cocoa butter were damp and damaged as a result of rainwater or condensation and not sea water.

Malted barley, mixed vegetables, chive rings, dates, dried fruit, pickling onions, apples, grapefruit, oranges and carrots were all free from pesticides. A mixed fruit contained 0.27 p.p.m. DDT.

Samples of white beans were examined for chloride allegedly derived from contact with aluminium chloride but without result. The beans were regarded as fit for human consumption.

Samples of sodium caseinate were found to be of normal composition and free from mould growth.

All canned goods were in good condition and free from undue metallic contamination.

Canned fish products were free from any radioactivity.

55 samples of tea and 11 of tea dust were free from infestation, mould growth, excessive stalk and any water contamination by way of rain, sea or condensation. 12 teas were also cleared of oil contamination. One sample of tea was mouldy and contaminated by sea water.

Assorted sugar confectionery contained only permitted colours although in some cases the colouring was overdone.

In the third quarter an unusually high quota of teas, 84 in all, were submitted. Of these, 69 were examined primarily for smoke damage but without convincing result. The teas were, however, coarse and brittle and very dry, obviously not top grade tea but probably suitable for the manufacture of instant teas.

Two samples of soup stock were alleged to be mouldy. The complaint probably arose from the entrainment of air bubbles.

Several samples of nut products, peanuts whole and flaked Brazil nuts were all free from aflatoxin. This limit of detection is 0.005 parts per million.

A sample of crude chewing gum base was found to contain 40 per cent of unsaponifiable matter.

A sample of Indian tea contained buff-coloured lumps of various sizes. These consisted of a very fine sand containing 84 per cent of silica with some iron. It would be virtually impossible to clean up the contaminated tea.

A sample of oriental ghee was actually prepared in Ireland! Ghee is usually prepared from buffalo milk but any fresh milk can be suitably inoculated with sour milk and processed to produce a ghee which has all the characteristics of butterfat. Ghee is devoid of water as was this sample.

Five Chinese foods, rice powder, water chestnut flour, flavoured rice chips and slices and bean curd contained traces of arsenic and lead, in all instances well within the statutory requirements. The rice chips contained only permitted colours.

Samples of walnuts from China, W. Pakistan and India were all kiln dried, in excellent condition, free from infestation, mould damage or empty nuts.

9. Housing Department

The 19 samples included 9 paints examined for pigment binder, solvent and gravity; a radiator deposit which consisted mainly of calcium carbonate with some iron and magnesium; two wall-papers both contaminated with urine; four fungicides examined for composition and comments on their use and three samples to test the efficiency of a water treatment preparation.

10. City Architect's Department

One examination only was required. This concerned fibre glass sheets. The fibre glass was only partially cured and bonding to the wall was rendered difficult by the presence of alkali.

11. Horticultural Officer

The six examinations included four of soil all of which were free from chlorate weed killer; tomato plants in which ammonia in traces was causing plant failures and dead fuchsias in which traces of gammexane and DDT were found, but once again no chlorate.

12. Weights and Measures Department

The Toys (Safety) Regulations and matters of Consumer Protection have produced a considerable increase in our work and contacts with this Department. 109 samples were submitted of which 38 were toys to be dealt with in Section 14.

Of the remaining 71 samples, the following comments can be made:—

Two paraffins were comparable by GLC and it was further noted that calorific values were practically identical. 7 further samples gave no apparent differences by Infra Red.

45 petrols were confirmed as of the grading stated. One was better than stated.
A horse manure consisted mainly of the remains of mushroom compost.
Alleged gold metallic finished buttons were shown to be finished with silver and a trace of colouring.
Of a group of 5 samples comprising 2 paraffins, 2 tractor vaporising oils and one burning oil, it appeared that one paraffin compared closely with the burning oil.
Two specimens of two-stroke mixture contained only traces of oil instead of the normal 5 per cent used in such cases.
A toy gun was reported as a potentially lethal weapon.

13. Baths' Superintendent

pH tablets were submitted and examined for a check on their effectiveness.

14. Toys (Safety) Regulations

40 toys were examined for compliance and the following deserved comment:—

M.495 A dumper truck contained chromium but less than 250 p.p.m.

M.892 A bucket contained 6,700 p.p.m. of soluble chromium.

No toys contained celluloid and the remaining 38 toys all satisfied requirements in respect of toxic metals in paint films. As compared with the 1968 position when 14 of 44 toys failed to satisfy the Regulations, it can be interpreted that 1 failure of 40 toys in 1969 is a marked improvement indicative that the Regulations are having the desired effect.

15. Gloucester City

The 8 specimens submitted will be considered in the City Report, Part X.

16. Special Survey—Thornbury R.D.C.

44 observations were made in this area for the presence of oxides of nitrogen. In all 133 observations have been made since the survey started in September, 1968.

17. District Inspectors' Samples

24 specimens were examined with the following results:—

A plaster from a wall gave no evidence of urine as was alleged.

A cooking oil somewhat surprisingly contained 1 per cent of petrol.

6 samples of mandarin oranges, canned, proved to be in poor condition. The internal lacquer was peeling and the fruit, whilst not unfit, would certainly prove unsaleable.

Various insects were identified as the larvae of the crane fly, the meal worm beetle, attagenus pello, the bacon beetle, wharf borer beetle, dog fleas and booklice.

A water showed a faint fluorescence as was anticipated.

7 samples of canned fruits were in excellent condition.

A sample of cheese contained fragments characteristic of the cockroach well embedded in the sample.

18. Geriatric Survey

17 blood samples collected from "Meadowsweet" residents were examined for ascorbic acid and white cell blood count. This is a continuing survey requested by the Environmental Services Committee.

19. Town Clerk's Department

Only one sample required attention. A water from a brook contained traces of a detergent but no other laundry waste.

REPORT ON THE WORK FOR THE COUNTY OF GLOUCESTER

This is my eighteenth report on the analytical and advisory services provided for the County in accordance with the 1951 agreement made with Bristol City Council.

As in earlier years, the main services relate to Food and Drugs, Fertilisers and Feeding Stuffs, together with examinations of waters, sewage and effluents, swimming bath control, Trades Description Act, Pharmacy and Poisons Act, Toys (Safety) Regulations, pesticide examinations and consultations in relation to primarily water, sewage and air pollution.

Summary of Examinations

Milks	921
Food and Drugs	843
Waters, Swimming Baths, Effluents	159
Fertilisers and Feeding Stuffs	290
Miscellaneous	268
	<u>2,481</u>
Pharmacy and Poisons Act	3
Air Pollution—Lead Peroxide	24
—Deposit Gauges	24
Spectrographic Analyses	100
Gas Chromatography	332
Chlorination	125
Trades Description Act, 1968	40
Toys (Safety) Regulations 1967	70
Thornbury Special Survey	44
	<u>762</u>
Total	<u>3,243</u>

This total is notably less than the record number of 3,789 recorded for 1968 but as already mentioned severe staffing upsets were the primary cause of the fall. Air pollution assessments for the Dursley and Stroud authorities fell to 345 largely due to the abandonment of the Stroud Survey from July onwards. Work on lead peroxide and rain gauges continued for the Thornbury authority covering two sites at Brynleaze and Walning Farms. Unlike conditions in 1968 when several gauge bowls were disturbed—a full year’s observations were made in 1969.

REPORT OF THE WORK FOR THE CITY OF GLOUCESTER

Summary of Examinations

Milk	54
Food and Drugs	286
Waters, Swimming Baths and Effluents	5
Fertilisers and Feeding Stuffs	29
Miscellaneous	11
Air Pollution—Lead peroxide	3
—Deposit Gauges	11
Spectrographic Analyses	16
Gas Chromatography	81
Chlorination	23
	<u>519</u>

The steady rise in the sampling rate of recent years continued—519 examinations in 1969 being just 20 more than the previous record year of 1968.

The adulterated samples included three Channel Islands milks. Sample 4173 was 10 per cent deficient in fat but the bulk fat with 4174 was 4·17 per cent. 4175 and 4176, both Channel Islands milks were 15 per cent deficient in fat. Seven ordinary milks had abnormal solids not fat. No food and drugs samples were returned as adulterated other than two samples of beef sausages with undeclared amounts of sulphur dioxide.

AIR POLLUTION

	<i>Bristol</i>	<i>Gloucester County</i>	<i>Gloucester City</i>
Lead Peroxide	60	24	3
Deposit Gauges	71	24	11
Smoke Recordings (City)	655	—	—
(Misc.)	345	—	—
	<u>1,131</u>	48	14

The overall examinations remained constant and presented much the same picture as in 1968. The examination of lead peroxide cylinders and rain gauges involved considerable analytical work. The city smoke recordings relate to the continuous smoke and sulphur dioxide apparatus operating at Canynge Hall, Monk's Park School and the Chief Public Health Inspector's office at St. Clement's House. The miscellaneous smoke recordings relate to similar apparatus at Dursley and Stroud but we are required to check stain intensities only.

The City Survey

When the deposition figures at the four city sites are corrected for a full twelve months exposure it will be noted that conditions at the city centre at 123 tons corrected shows a significant improvement over 1967 and 1968 conditions. Further, that at Shaftesbury Crusade, St. Philips the 142 tons is much as in 1968 but notably better than 1967 and that the Zoological Gardens figures are fairly steady around 90 tons and that 94 tons for 1969 is the best figure since 1964. The most notable improvement is at the Blaise site with 112 tons compared with 139 tons in 1968 and 132 tons in 1967. The overall picture is one of some general improvement linked in all probability with notably lower rainfall figures in 1969, certainly when viewed against the 1968 heavy rainfall in July of that year. The 1969 data shows 5 to 6 inches less rain than in 1968 and 1 to 2 inches better than 1967. Indeed the last comparable year's rainfall appears to be 1959.

Reviewing the average SO_3 figures, we find a good figure of 1.37 at the city centre, much as it was in 1968, and the best figure since 1962 (excepting 1.35 in 1968). At the Shaftesbury Crusade site conditions seemed to have stabilised in the last four years.

At the Zoological Gardens and Blaise the figures for 1969 are not quite as good as the 1968 figures, although both are better than 1967 figures. It would appear possible to predict that the Zoo figure in any one year will be about 0.6 to 0.7 and at Blaise 0.7 to 0.8, both ranges now noticeably better than the data of 1954 to 1959. General improvement at these sites was first apparent in 1960.

The Avonmouth Survey

Only sulphur pollution was assessed in this area. The figure of 0.90 is not quite as good as the 1967 and 1968 results but otherwise the degree of pollution in the area has certainly improved in the last three years to levels better than the 1957, 1962-1966 surveys.

The Thornbury Survey

Sulphur pollution at Walning Farm has been very steady between 0.4 and 0.6 mgms. since 1958. The present year showed 0.55 mgms.

The current year at Brynleaze Farm has produced the lowest sulphur pollution since 1958—a very satisfactory state. In earlier years the Brynleaze Farm figures have always been at least 0.10 mgm. higher than at Walning. This is the first reversal of pollution figures in 6 years.

The deposition at 92.6 tons represents the average figure for the Walning Farm site. Since 1958 it has ranged in the region of 80 to 100 tons. The Brynleaze Farm figure at 83.4 tons is a favourable one and compares well with the 1964 figure. Deposition figures have shown wider variation than at Walning. 1958 to 1960 were good years with 50 to 70 tons, 1961 to 1964 showed 83 to 101 tons, 1965 to 1968 70 to 109 tons. Thus 83 tons in 1969 is indicative of some improvement.

The rainfall figures at both sites are both back within the normal range for the area, that is 23-30 inches—at Walning 28.3 for 1969 and at Brynleaze 27.8 inches.

The Gloucester City Survey

All results from 1958 to 1968 relate to the conditions around the Technical College site. Only one month's observations were made here in 1969 with these results—

Deposit 6.7 tons; rainfall 1.86 inches; SO_3 1.43 mgms. As from the 1st March, 1969 a new series of observations began at Rikenel and these are the figures recorded in Table 15. There are no SO_3 figures by lead peroxide since the city have set up the continuous apparatus. The comment made in the 1968 report therefore stands and cannot be used to interpret the Rikenel data. A few years will have to elapse before the pattern of this site emerges.

The Central Health Clinic

The deposition at 143.4 tons is the lowest since 1962 and represents a general improvement of 17 tons over 1967 and of 50 tons over 1962. The rainfall at 27.6 inches represents a "dry" year.

OTHER ACTIVITIES

I was honoured by the local section of the Royal Institute of Chemistry in January when I was asked to deliver the Christmas lecture for the sixth-formers of the schools of the city and surrounding areas. The lecture on the work of the public analyst was delivered twice, morning and afternoon, at the Royal Fort and over 800 sixth-formers attended. The lecture was well received and the local section committee were satisfied with the break from the traditional and more academic lectures of earlier years.

In early May the Association of Public Analysts met in Bristol for their annual general meeting. This was a three-day affair. On the 8th May members and wives visited the B.O.C.M. at Avonmouth and we are most grateful to B.O.C.M. for arranging the visit and for their generous hospitality. This was followed in the evening by an informal dinner at the Royal Hotel.

On the 9th May the A.G.M. proper was held at the hotel followed by two lectures on "Hygiene with particular reference to the Chocolate Industry" and "Some Aspects of the operation of the Road Safety Act" given by B. A. Penney, Hygiene Officer, J. S. Fry and Son, Somerdale and Dr. M. W. Duckworth, Principal Scientific Officer, South Western Forensic Laboratory. The Association expressed its thanks to both of these lecturers.

Lunch was taken at the hotel and the party proceeded in two coaches to Slimbridge. Regrettably the weather broke and it rained heavily for most of the visit which was nevertheless most enjoyable. The introductory film "Wild Wings" received much praise. It was indeed a beautiful film made the more enjoyable by Peter Scott's commentary. High tea at the Slimbridge restaurant was most acceptable after such an inclement afternoon. A somewhat late return to the hotel meant a hurried change for most people in readiness for the civic reception at the Council House when we were graciously received by the Lord Mayor, Alderman Mrs. M. Castle. Many civic guests were entertained and the evening was a most pleasant function with very generous hospitality. Altogether an evening to remember in the history of our association.

On Saturday, 10th May members assembled at Canynge Hall to continue with a few outstanding A.G.M. items, to tour the laboratories and to chat with members of the staff—many of whom are associate members of the association. Shortly after twelve noon a general move was made to No. 8 Cote House Lane for a buffet lunch. Again the weather was very poor although in the few brighter periods members and wives had the chance to see the garden. My wife and I will never really know how we coped with nearly eighty people but all went well and members of the staff and of my own family and even the local policeman, coped admirably. So, despite all that the weather could do, everybody seemed to have enjoyed the whole arrangements certainly as was evidenced later by the most flattering letters in praise of what had been achieved. I should add, at this juncture, my sincere thanks to all who helped to make this three-day event such a success and particularly to thank members of the staff for all their help and co-operation.

Court proceedings were instituted in respect of twenty-three specimens relating to foreign bodies in food, ordinary and Channel Islands milks deficient in fat and also two cases of watered milk, fresh cream slices and buttered buns with no evidence of butterfat, and a paraffin which was not of the quality alleged to have been supplied. The foreign bodies included bees in plums, mould in bread, glass in milk, cigarette in bread, pin in bread, a fingernail in a custard tart, a snail in milk, a piece of plastic in bread. There was also one case of antibiotic in milk and one instance of the watering of whisky. In twenty-one cases a plea of guilty was entered and I was called to give evidence only in the remaining two, one of bees in plums and a watered milk.

I attended two London meetings in Whitehall of the Pesticide Panel for collection of data—one in May and one in October. In October I assisted at the interview of a candidate for a post to the New South Wales Government which took place at the London offices in the Strand.

As President of the Association of Public Analysts, I attended several council and other meetings of the Association and I am most grateful to the local authority for permission to attend these meetings where much food and drug business and allied legislation concerning the Department is discussed. I also attended a meeting at Reading University to discuss the prospects of a full-time course in food and drugs.

In November I assisted at the London—Caxton Hall—symposium on Food Legislation with a paper on the laymen's approach to Food Legislation—a useful meeting sponsored by the Royal Society of Health.

I attended numerous other committee meetings during the year both for the city and the county and there were two interesting Zone B meetings at Exeter (March) and Cheltenham (September) in continuance of discussions on pesticides and matters of mutual interest to the seven laboratories in this area at Exeter, Taunton, Bristol, Cardiff, Glamorgan county and Carmarthen.

Several outside visits were made during the year among these to I.C.I. (Sevenside), to the Royal Institute of Chemistry to attend the Examinations Board for the M.Chem.A. qualification, to the P.H.L.S. for discussions on industrial water, the B.I.B.R.A. (Carshalton) to tour the laboratories there, to Llantrisant (S. Wales) to view new apparatus and particularly atomic absorption equipment.

A new venture of lunch time lectures at Canynge Hall designed primarily with general practitioners in mind, proved very successful and three members of staff attended and took part in discussions on such subjects as Dust is Dangerous, Inorganic Lead Absorption and Asbestos Dust.

Lectures to the following organisations and courses were given during the year :—

Christmas Lecture, Royal Institute of Chemistry, Local Section, Royal Fort

Several lectures to 2nd and 3rd year Trainee Public Health Inspectors.

Four lectures to the D.P.H. Course.

The North West Townswomen's Guild at Henleaze.

The Keynsham Methodist Church Evening group.

Brislington School visit to the laboratories.

The 4th year Medical Students.

The Catering Students Final Year.

The Science Society of Colston School.

Clifton High School visit to the Laboratories.

Air Pollution lectures to 3rd P.H.I. and for Diploma Course.

Lecture of Water to 2nd year P.H.I. with laboratory visit.

Staple Hill, Congregational Church Wives Group.

Clinical Assistants visit to the laboratories.

Medical students visit to laboratories.

Nursery Students lecture and laboratory visit.

5th year Medicals.

3rd year pupils, Withywood School.

Science Society of Malmesbury Grammar School.

Engineers Society at University.

Wives Guild, St. Peter's Church, Portishead.

Final Year Chemistry Students—a special talk on careers in Chemistry in Local Government. and A paper to the Royal Society of Health at Caxton Hall in November on Food Legislation.

SPECIAL TOPICS

The survey for dithiocarbamates in foodstuffs continued during the year and 192 samples of fresh fruit and vegetables were examined. The presence of dithiocarbamate was demonstrated in 4 samples and the following concentrations were found — 2 p.p.m. in onions, 5 p.p.m. in apples, 7 p.p.m. in pears and 13 p.p.m. in blackcurrants.

Following the inclusion of arsanilic acid in pig feeding stuffs and some chicken meals as a growth promoter and coccidiostat, samples of pigs liver and chicken have been examined for the presence of arsenic. In all, 37 specimens of pig liver were submitted, 17 of which contained less than 1 p.p.m., 16 contained between 1 and 2 p.p.m., 2 contained between 2 and 3 p.p.m. and 2 contained between 3 and 4 p.p.m. Thus, just over half the specimens contained more than the maximum level of 1 p.p.m. arsenic laid down by the Arsenic in Food Regulations, 1959. Some 9 chickens were submitted, the flesh and liver being examined separately and in all cases, the level of arsenic was less than 1 p.p.m.

Premium Paraffin Survey

An investigation into the quality of premium paraffin, suitable for use in wick fed unflued domestic space heaters, was carried out, with regard to the possible attempted imitation of well known coloured paraffins (e.g. Esso Blue, Aladdin Pink, etc.) by dyeing the cheaper regular grade paraffin. The regular grade fuel has a higher aromatic content than the premium grade, giving rise to such differences in performance as a more smokey flame, and it is more suitable for use in flued appliances. The regular grade paraffin could also be mixed with premium grade and sold as genuine branded paraffin.

Forty-eight samples, representative of some nine producers and taken under the Trades Description Act, 1968, were examined for aromatic content, using Infra Red Spectroscopy, Smoke Point, Flash Point, Specific Gravity, colour and the presence of Customs' markers.

Evidence of the presence of "other paraffin" was found in thirteen of the samples. While the majority of producers sampled conform to the accepted quality standard for premium paraffin, in two cases the paraffin was considered to be only regular grade in quality.

A British Standard defining premium paraffin is at present being prepared and appears to be urgently needed.

Emulsifiers and Stabilisers

During the year work has commenced on the analysis of emulsifiers and stabilisers.

According to the Emulsifiers and Stabilisers in Food Regulations, 1962 (Statutory Instrument No. 720, 1962) the following are permitted emulsifiers or stabilisers in foodstuffs.

- Stearyl tartrate
- Complete glycerol esters
- Partial glycerol esters
- Partial polyglycerol esters
- Propylene glycol esters
- Monostearin sodium sulphoacetate
- Sorbitan esters of fatty acids and their polyoxyethylene derivatives
- Cellulose ethers
- Sodium carboxymethyl cellulose
- Brominated edible vegetable oils

Many of these food additives are quite harmless, i.e. complete and partial glycerol, polyglycerol and propylene glycol esters and a number are present naturally in fatty foods. Stearyl tartrate is for exclusive use in bread and is harmless and monostearin sodium sulphoacetate has been used only spasmodically as an anti-spattering agent in margarine.

An investigation of the methods available for sorbitan esters of fatty acids and their polyoxyethylene derivatives (called respectively Spans and Tweens) has taken place and those based on TLC and GLC have been established.

Brominated vegetable oils are used in soft drinks and there is some evidence that these compounds can cause tumorous growths in rats and mice. Whilst there is no evidence to suggest that these compounds are harmful to man there is a probability that this group will be shortly withdrawn from the Regulations and therefore work is in progress on analytical methods to evaluate them in soft drinks.

VETERINARY OFFICER'S REPORT 1969

J. Allcock, B.V.Sc., M.R.C.V.S.

(Inspector under Diseases of Animals Act)

After the upheaval of the foot and mouth epidemic mentioned in the last two years reports, the notifiable disease is this year very much better.

Except for one case of *Anthrax* no notifiable disease has been diagnosed within the city.

The *Anthrax* was again a case imported from outside, in that a carcase was moved from an adjoining county to a knacker yard in Bristol. Only when the carcase was opened was anthrax suspected, and later confirmed. Legislation requires that the owner of any animal which may reasonably be suspected of dying from or being affected with *Anthrax* shall report this forthwith to the local authority. Sudden unexplained death in any animal can be reasonable cause to suspect *Anthrax*, and if the owner would report this then steps could be taken to confirm or exclude the disease on the farm—at no expense to the owner. If the case was a positive one of *Anthrax*, destruction of the one carcase would be undertaken by the local authority of the district concerned.

Without observation of this proper procedure the carcase appears in Bristol, is opened—at some considerable danger to the humans involved—and because of contamination a much larger area has to be disinfected, and on this occasion several other contaminated carcasses and meat and offal had to be destroyed by burning. All this at the expense of the Bristol ratepayer. Another case has occurred in 1970 under similar circumstances, so it appears that an unfortunate experience does not help in avoiding the next case.

Rabies caused a lot of concern nationally, and the appearance of the first case outside quarantine since 1926 emphasised the importance of this disease, and that no precaution can be too strictly enforced.

As a port, Bristol is constantly exposed to potential infection from ship's dogs and cats. Twice this year dogs have got ashore, and once a crew member was stopped from taking a dog for a walk around the Centre, and he had already left the ship.

The police and customs officers do a lot to advise Masters, especially Masters of foreign vessels, of their responsibilities in controlling dogs and cats aboard their vessel while in port, but in some cases the Masters do not care to understand or the crew do not care to take instructions which do not apply in their home country.

As with *Anthrax* effective policing of the regulations is expensive of manpower and money. Within the limits of manpower a close check is kept on all dogs arriving in any of the docks, but this check is by no means as effective as one would wish, and although the chances of a dog getting ashore are quite high the chances of that dog being infected with *rabies* are very small—but *they exist*—and should such an unlikely mishap occur the consequences would be appalling.

I understand that in road improvements £9,000 is equated with the cost of one human life. Safety cabs fitted to tractors have been estimated to cost £400,000 per life saved. Within these wide limits there is a place for equating the very limited money spent on policing the importation of dogs with the possible risks involved. As a practical suggestion I return the one I made some years ago requiring a substantial deposit from the master of each vessel carrying a dog or cat. On safe removal of the dog when the vessel sailed such deposit to be refunded.

As a result of the increasing risk of *rabies* the quarantine period was increased, and importation of dogs and cats is now prohibited. Many other exotic animals which could be *rabies* carriers have also been proscribed or their import severely restricted.

Pet Animals Act 1951

Twenty eight premises were licensed for the sale of pets under this Act. The general standards are good, but a small number still provide the very minimum accommodation and attention.

As a result of the prohibition of the import of exotic animals many species have ceased to appear in pet shops. In my view to the benefit of these species and the general good of the human race.

All pet shops in the city have been visited—many on numerous occasions.

Boarding Establishments

Three premises are licensed for the boarding of animals.

Riding Establishments Act

Two premises have been licensed. One of these continues to cause some concern, and repeated visits have been made.

General matters that have taken time and been of interest during the year include (again) pigeon control. Control of dogs on roads, export of horses and import of Zoo animals through Avonmouth.

Partly in a private capacity, but also with public health connotations I have been concerned with pollution around Severnside. A number of cattle were poisoned as a result of an accidental discharge of arsenic. Accidents can happen, but if they do it would be more helpful if the information about the accident could be made public before such deaths occurred.

Finally my annual "thank you" to all who help through the year. This I repeat each year, but this repetition does not reduce the sincerity. In particular the disinfection squad. These men do a very unpleasant job at all hours of the day and night with the greatest cheerfulness and expertise imaginable. They are always of great help.

